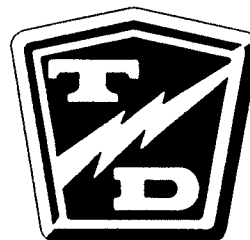


TAYLOR-DUNN



MB-661-99

*OPERATORS and MAINTENANCE
MANUAL*

This Manual Covers Serial
Numbers: 127659 & up

MODELS:
B6-61E

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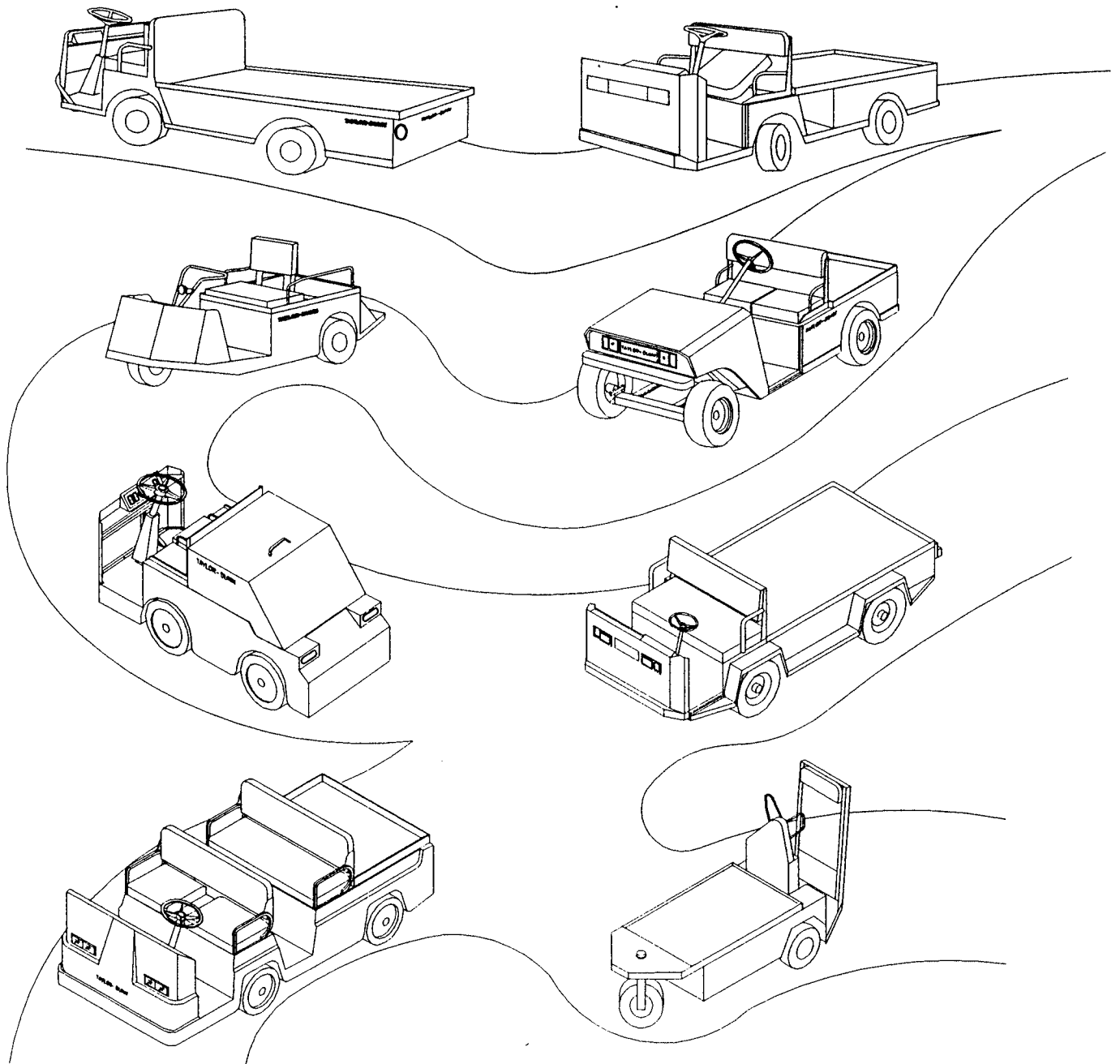
Table of Contents

Introduction	1-1
About This Manual	1-2
NOTATIONAL CONVENTIONS	1-3
Vehicle Description	1-4
STANDARD SPECIFICATIONS B 6-61E	1-5
TAKING DELIVERY OF YOUR VEHICLE	1-6
Inspecting the Vehicle	1-6
What To Do If You Find A Problem	1-6
Safety Rules and Operational Information	2-1
Safety Rules and Guidelines	2-2
Driver Training Program	2-3
Driver Qualifications	2-3
VEHICLE CONTROLS	2-4
Key-Switch	2-4
Seat Interlock Switch	2-4
Forward-Reverse Switch	2-4
Accelerator Pedal	2-4
Steering	2-5
Foot Brake Pedal	2-5
Park Brake Lever	2-5
Horn Button	2-5
Lights and Accessories	2-5
Hour Meter (optional)	2-5
Battery Status Indicator	2-5
Vehicle Operational Guidelines	2-6
Driving	2-6
Loading and Unloading	2-6
Parking	2-6
Towing	2-6
Storing and Returning to Service	2-7
Returning To Service	2-7

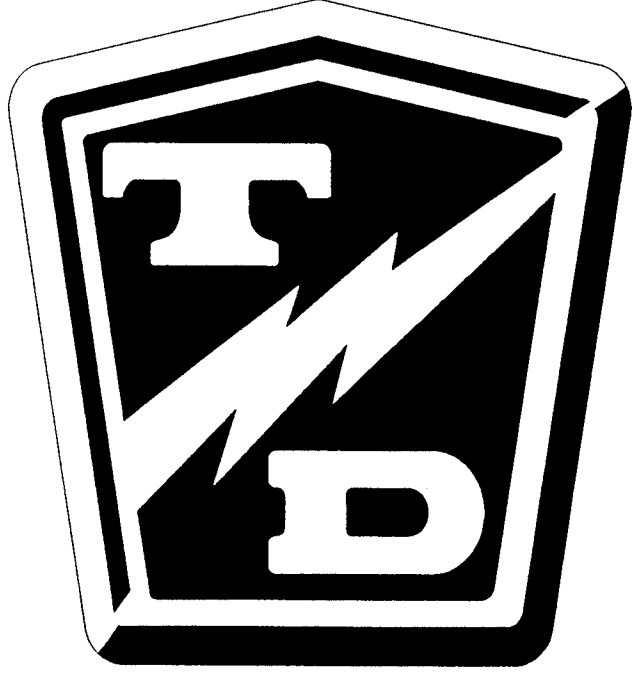
Maintenance and Service Procedures	3-1
Maintenance Guidelines	3-2
TROUBLESHOOTING GUIDE	3-5
Brakes	3-7
Disc Brakes	3-8
Brake Pads	3-8
Brake Figure 1: Exploded View of Disc Brake Assembly	3-8
Repairing the Brake Body	3-9
Drum Brakes	3-10
Replacing the Brake Shoes	3-10
Adjusting the Drum Brakes	3-11
Replacing the Master Cylinder	3-12
Brake Figure 3: Master Cylinder	3-12
Bleeding the Brakes	3-14
Filling and Checking the Fluid Level	3-16
Front Axle and Steering	3-17
Axle Removal	3-17
Axle Installation	3-18
Aligning the Front End	3-18
Steering Figure 1: Front End Alignment	3-19
Centering the Steering	3-20
Wheel Bearings	3-21
Ball Joints	3-22
Steering Figure 4: Steering Gear	3-22
Steering Gear Adjustment	3-23
Endplay	3-23
Gear Lash	3-23
Steering Column	3-24
Removal	3-24
Installation	3-24
Exploded View of Steering Gear	3-25
Rear Axle	3-27
Removal	3-27
Installation	3-27
Axle Shaft Removal	3-28
Bearing or Oil Seal Replacement	3-28
Axle Shaft Installation	3-29
Replacing the Axle Assembly	3-29
Disassembly of Differential Carrier	3-30
Replacing the Pinion and Bearings	3-31
Replacing the Ring Gear	3-31
Assembly of Differential Carrier	3-32
Adjusting the Ring Gear and Pinion Backlash	3-32
Gear Replacement (Spur Gear Reduction)	3-32

Drive Motor	3-37
Replacing the Brushes	3-37
Inspecting the Armature	3-38
Battery Figure 1: Electrolyte Level	3-39
Battery	3-39
Cleaning	3-39
Servicing	3-40
Charging	3-40
Battery Storage	3-41
Tires	3-42
Servicing the Tires	3-42
Electrical Troubleshooting	3-43
Wire Diagram B6-61E	3-48

Illustrated Parts	4-1
FRONT AXLE	4-2
FRONT SUSPENSION	4-4
STEERING COLUMN	4-6
STEERING GEAR	4-8
PARK BRAKE	4-10
MASTER CYLINDER AND BRAKE LINKAGE	4-12
BRAKE LINES	4-14
FRONT BRAKE	4-16
REAR BRAKES	4-18
MOTOR	4-20
POWER TRACTION	4-22
DIFFERENTIAL	4-24
REAR AXLE	4-26
REAR SUSPENSION	4-28
TIRES	4-30
CONTROL PANEL	4-32
INSTRUMENT PANEL	4-34
DECALS	4-36
MISC. STANDARD PARTS	4-38
HITCHES	4-40



TAYLOR-DUNN



Introduction



Section 1*About This Manual*

This manual provides you with information you need to safely operate and maintain this vehicle.

We assume that those who will perform maintenance or repair operations are trained vehicle service technicians capable of performing minor and major repairs and qualified to use the tools required.

We also assume that they have or will attend a training program designed to familiarize them with the safe operation and use of this particular vehicle.

This manual contains the following major sections:

SECTION 1: INTRODUCTION

Contains information about how to use this manual, and a description of the vehicle, how to do an incoming inspection and vehicle specifications.

SECTION 2: VEHICLE OPERATION

Provides safety rules and guidelines describes the driver training program and explains the operation of each control on the vehicle.

SECTION 3: MAINTENANCE PROCEDURES

This section contains a scheduled maintenance checklist, lubrication diagram, troubleshooting guide, and detailed maintenance procedures.

SECTION 4: ILLUSTRATED PARTS

Includes an illustration and parts list for each assembly that are used in this vehicle.

NOTATIONAL CONVENTIONS

The following types of conventions are used throughout this manual:

WARNING

A warning alerts you of something that may cause injury to yourself or others. Be sure you exercise special care and follow any instructions provided in a warning message.

CAUTION

A caution informs you of something that may cause damage to the vehicle. Be sure you exercise special care and follow any instructions provided in a caution message.



A NOTE PROVIDES ADDITIONAL INFORMATION ABOUT A SUBJECT.

Section 1*Vehicle Description*

This manual applies to vehicles with serial numbers starting at 128029.

This vehicle is designed to be driven on smooth surfaces in and around industrial plants, nurseries, institutions, motels, mobile home parks, and resorts.

This vehicle is not designed to be driven on public highways. It is built to order, and is available in speed range of approximately 7 m.p.h. . The truck travels on a level surface with no load at this approximate speed. Do not exceed this speed. Exceeding this speed may result in steering difficulty, motor damage, and/or loss of control. It is not designed to be towed more than 5 m.p.h..

The vehicle can handle a total payload (including cargo, optional equipment, passengers, and driver) of, up to 6400 pounds (depending on model and options), *see Standard Specifications Table on page 1-6*. The Vehicle Specification Tag will indicate model and capacity. Do not exceed this capacity. Various options are available to enable you to customize the vehicle to suit your particular needs (consult your Taylor-Dunn salesperson or representative for current options).

This vehicle conforms to requirements for Type E vehicles as described in O.S.H.A. Standard Section 1910.178 (Powered Industrial Trucks) and with all applicable portions of the American National Standard for Personnel and Burden Carriers (ANSI B56.8).

The model and serial number for this vehicle are imprinted on a decal located under the passenger seat, and stamped in center park brake mounting plate between the seats.

STANDARD SPECIFICATIONS B 6-61E

ITEM	SPECIFICATION
Model Number	B6-661E
Standard Dimensions	335L X 129W X 147H (centimeters)
	132 L X 44 W X 58H (inches)
	Bed Size: 54 X 78 (inches)
Dry weight	
Turning radius	416.5 centimeters
	164 inches
Transmission	Spur Gear
Brakes	4 Wheel Hydraulic Brakes
Motor	DC Series Wound 36V, 15hp @ 1,400 rpm
Tires	Rear - 21 X 5 , Front - 18 X 5 - Solid Soft Cushion
Tire pressure	Not Apply
Maximum load	6,400 Lbs. (includes driver and optional equipment)
Battery	36V,

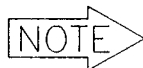
Section 1

TAKING DELIVERY OF YOUR VEHICLE

THIS VEHICLE SHOULD BE INSPECTED IMMEDIATELY AFTER DELIVERY.
Use the following guidelines to make sure there are no obvious problems.

Inspecting the Vehicle

1. Examine the contents of all packages and accessories that may have come in separate packages with this vehicle.
2. Make sure everything listed on the packing slip is there and that nothing is broken or damaged.
3. Examine any visible wiring for obvious signs of damage and check that all connections are secure.
4. Check that battery connections are tight and all cells are filled.
5. Inspect the tires for obvious wear or damage.
6. Make sure that all wheel lugs are secure.
7. Check the body, seats, windshield (optional), trim and other external parts for obvious damage.
8. Operate each of the following controls before turning on the key-switch:
 - ◆ Accelerator pedal
 - ◆ Brake pedal
 - ◆ Forward - reverse selector lever
 - ◆ Parking brake
 - ◆ Steering wheel
 - ◆ Horn
 - ◆ Lights



EACH CONTROL SHOULD OPERATE SMOOTHLY AND EASILY WITHOUT STICKING OR REQUIRING UNDUE EFFORT.

What To Do If You Find A Problem

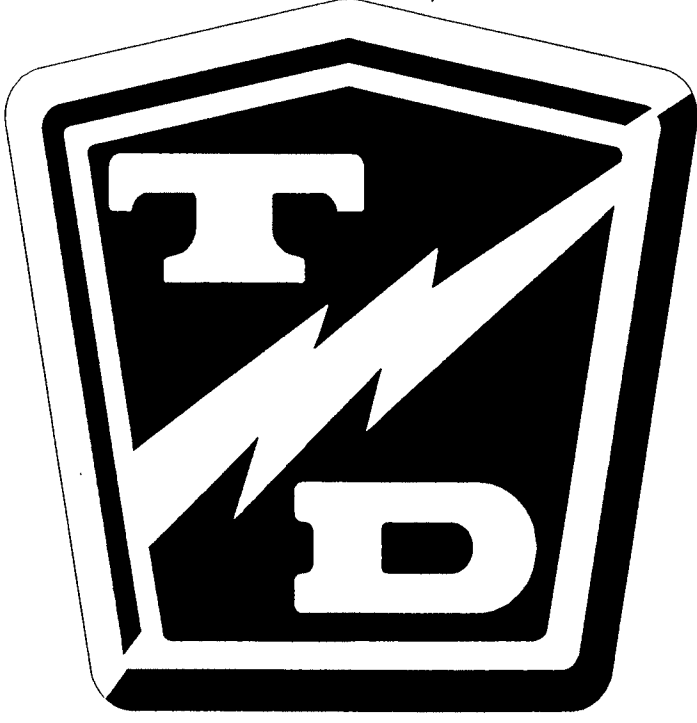
If you find a problem with this vehicle, you must immediately file a claim with the carrier. The claim must be filed within 48 hours of receiving this vehicle. Forward a copy of the damage claim to your Taylor-Dunn dealer.

⚠ WARNING

Do not repair modify or adjust any part of this vehicle unless you are authorized to do so. Incorrect repairs may result in injury to yourself and others and cause the invalidation of your warranty.

NOTES

TAYLOR-DUNN



Safety Rules and Operational Information



Section 2

Safety Rules and Guidelines

It is the responsibility of the owner of this vehicle to assure that the operator understands the various controls and operating characteristics of this vehicle. As well as, obeying the following safety rules and guidelines (extracted from the American National Standards Institute Personnel and Burden Carriers ANSI B56.8).

This vehicle is designed to be driven over smooth surfaces in and around places such as warehouses, nurseries, motels, parks, and resorts. Before you drive this vehicle, please observe the following safety rules and guidelines:

⚠ WARNING

This vehicle is not designed to be driven on public highways. The drive is built to order. It is available in a speed range of 7 m.p.h.. The truck travels on a level surface with no load at this speed. Do not exceed this speed. Exceeding this speed may result in steering difficulty, motor damage, and/or loss of control. It is not designed to be towed more than 5 m.p.h..

- ◆ Do not drive this vehicle unless you are a qualified and trained operator.
- ◆ Keep all body parts (head, arms', legs') inside this vehicle while it is moving.
- ◆ Drive slowly when making a turn especially if the ground is wet slippery or when driving on an incline.
- ◆ This vehicle may overturn easily if turned sharply when driving at high speeds, especially when on an incline.
- ◆ Drive only on level surfaces or on surfaces having an incline of no more than 10% (5.6 degrees.).
- ◆ Do not drive over loose objects, holes, or bumps.
- ◆ Observe all traffic regulations and speed limits (15 m.p.h. max.).
- ◆ Keep to the right under normal conditions.
- ◆ Maintain a safe distance from all objects.
- ◆ Keep the vehicle under control at all times.
- ◆ Yield right of way to pedestrians, ambulances, fire trucks, or other vehicles in emergencies.
- ◆ Do not overtake another vehicle at intersections, blind spots, or other dangerous locations.
- ◆ Keep a clear view ahead at all times.

Driver Training Program

The owner of this vehicle shall conduct an Operator Training program for all those who will be operating this vehicle. The training program shall not be condensed for those claiming to have previous vehicle operation experience. Successful completion of the Operator Training program shall be required for all personnel who operate this vehicle.

The Operator Training program shall include the following:

- ◆ Operation of this vehicle under circumstances normally associated with your particular environment.
- ◆ Emphasis on the safety of cargo and personnel.
- ◆ All safety rules contained within this manual.
- ◆ Proper operation of all vehicle controls.
- ◆ A vehicle operation and driving test.

Driver Qualifications

Only those who have successfully completed the Operator Training program are authorized to drive this vehicle. Operators must possess the visual, auditory, physical, and mental ability to safely operate this vehicle as specified in the American National Standards Institute Controlled Personnel and Burden Carriers ANSI B56.8.

The following are minimum requirements necessary to qualify as an operator of this vehicle:

- ◆ Demonstrate a working knowledge of each control.
- ◆ Understand all safety rules and guidelines as presented in this manual.
- ◆ Know how to properly load and unload cargo.
- ◆ Know how to properly park this vehicle.
- ◆ Recognize an improperly maintained vehicle.
- ◆ Demonstrate ability to handle this vehicle in all conditions.

Section 2**VEHICLE CONTROLS**

The following describes the use of each control on this vehicle.



SOME CONTROLS ARE OPTIONAL EQUIPMENT AND MAY NOT BE INSTALLED ON THIS VEHICLE.

Key-Switch

A key-switch located on the right side of the instrument panel turns the vehicle on. Rotate the key clockwise to turn the vehicle on counterclockwise to turn the vehicle off. The key-switch should be in the off position whenever the operator leaves the driver's seat.

This switch is also designed to secure and disable the vehicle. You can remove the key ONLY when the key-switch is in the OFF position.

Seat Interlock Switch

A switch located under the driver's seat disables the vehicle when the driver leaves the seat. The driver must be seated for the vehicle to operate.



THIS IS AN ADDED SAFETY FEATURE AND SHOULD NEVER BE BYPASSED.

Forward-Reverse Switch

The forward-reverse rocker switch, located on the dash, determines the direction of travel (forward or reverse) of the vehicle. Push the top of the switch to make the vehicle go forward. Push the bottom of the switch to go in reverse.

DO NOT SHIFT from forward to reverse or vice-versa while the vehicle is in motion. Make sure the vehicle is completely stopped before shifting.

The Forward-Reverse switch has a neutral position. The Forward-Reverse switch should be in the neutral position with the park brake set whenever the operator leaves the driver's seat.

Accelerator Pedal

The accelerator pedal located to the right of the brake pedal. It controls the speed of the vehicle, is designed for right foot operation only, operates the same way as the accelerator pedal in an automobile, and controls the vehicle's speed.



DEPRESS THE PEDAL TO SPEED THE VEHICLE UP. RELEASE THE PEDAL TO SLOW DOWN.

Steering

The steering wheel and steering system is an automotive type. To turn right, turn the steering wheel to the right (clockwise). To turn left, turn the steering wheel to the left (counter clockwise).

Foot Brake Pedal

The foot brake pedal located to the right of the steering column is for operation with the right foot only. It works the same as the brake in an automobile. Applying pressure to the brake pedal slows the vehicle according to the amount of pressure you apply. Removing your foot from the pedal releases the braking action.

Park Brake Lever

The park brake is actuated with a hand lever located between the two front seats. To set the park brake pull the lever back until it locks. To release the park push the lever all the way forward. The park brake can be adjusted using the adjusting knob on the end of the lever/handle.

CAUTION

Do not operate the vehicle with the parking brake applied. Severe motor/control damage will result.

Horn Button

The horn button is located in the center of steering wheel. Depress the button to sound the horn, release it to turn it off.

Lights and Accessories

The headlight switch is located of the left side of the instrument panel. An accessory switch, if any, is adjacent and to the right of it.

Hour Meter (optional)

The hour meter is located to the right of the battery status indicator. This tracks the number of hours the vehicle has been in operation.

Battery Status Indicator

The battery status indicator is located to the right of the accessory switch. The normal operating range is in the green zone. The vehicle needs charging if it is in the yellow zone to the left. If it is in the red zone to the left, the vehicle should be taken out of service immediately to be charged.

Section 2*Vehicle Operational Guidelines*

Driving

- ◆ Slow and sound the horn when approaching a corner or other blind intersection.
- ◆ No horseplay or dangerous driving.
- ◆ Do not drive this vehicle in hazardous areas unless this vehicle is approved and labeled for such operation.
- ◆ Immediately report any accident or vehicle problem to your supervisor.

Loading and Unloading

- ◆ Do not load cargo that can easily fall off this vehicle.
- ◆ Do not exceed the cargo load capacity of this vehicle.
- ◆ Do not carry more than the maximum number of passengers allowed for this vehicle.
- ◆ Be extra careful when handling cargo that is longer, wider or higher than this vehicle.

Parking

- ◆ Set the parking brake and place shift lever in neutral before leaving the vehicle.
- ◆ If you will be away from this vehicle turn off the key-switch, remove the key and take the key with you.
- ◆ If you park this vehicle on an incline block the wheels.
- ◆ Do not block fire aisles, fire equipment, or stairways.

Towing

To tow these vehicles attach a tow strap to the front bumper tow-bar and place the forward/reverse shift lever in the neutral position. Use another driver to steer this vehicle while it is being towed. Be sure the driver uses the brakes when the towing vehicle slows or stops.

▲WARNING *Do not exceed 5 MPH or carry any passengers while towing this vehicle.*

Storing and Returning to Service

- ◆ Do not store batteries in a discharged condition. Fill, charge, and clean batteries fully before putting in storage
- ◆ Lube all grease fittings. Spray all exposed metal surfaces with a light oil.
- ◆ Clean and dry all exposed electrical connections.
- ◆ Inflate tires to proper pressure and then block them off the ground.
- ◆ If stored for a prolonged period the batteries should be charged as follows;

Storage Temperature	Charge
Below 40° F	Every 6 months
40° - 60° F	Every 2 months
Above 60° F	Once a month

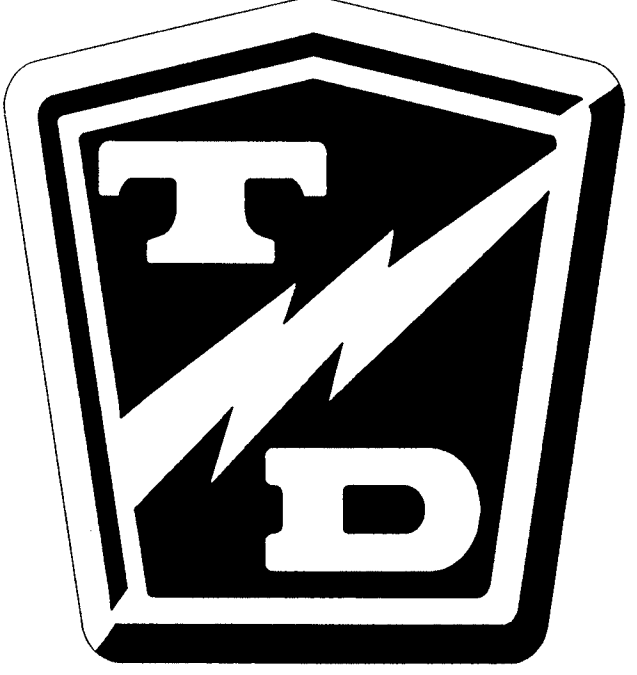
Returning To Service

Check state of charge of batteries and charge if necessary.

Perform **ALL** maintenance checks in the periodic checklist in section 3.

Test drive before putting into normal service.

TAYLOR - DUNN



Maintenance and Service Procedures



Section 3

This section explains how to perform the scheduled maintenance procedures. Use the Maintenance Checklist to determine how often you should perform each procedure. Vehicle maintenance or repairs should only be performed by a qualified mechanic.

This section contains the following:

- ◆ Maintenance guidelines.
- ◆ Maintenance checklist.
- ◆ Lubrication chart.
- ◆ Troubleshooting guide.
- ◆ Detailed maintenance procedures.
- ◆ Avoid fire hazards and have fire protection equipment present in the work area. Do not use an open flame to check level or leakage of battery electrolyte. Do not use open pans of fuel or flammable fluids for cleaning parts.
- ◆ Ventilate the work area properly.
- ◆ Regularly inspect and maintain in a safe working condition, brakes, steering mechanisms, speed and directional control mechanisms, warning devices, lights, governors, guards and safety devices.
- ◆ Inspect and maintain battery limit switches, protective devices, electrical conductors and connections in conformance with Taylor-Dunn's recommended procedures.
- ◆ Keep the vehicle in clean condition to minimize fire hazards and facilitate detection of loose or defective parts.

Maintenance Guidelines

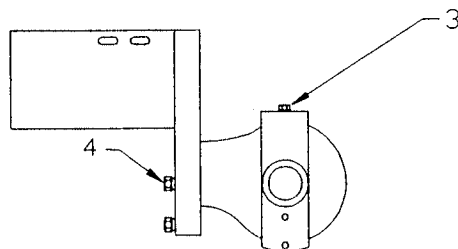
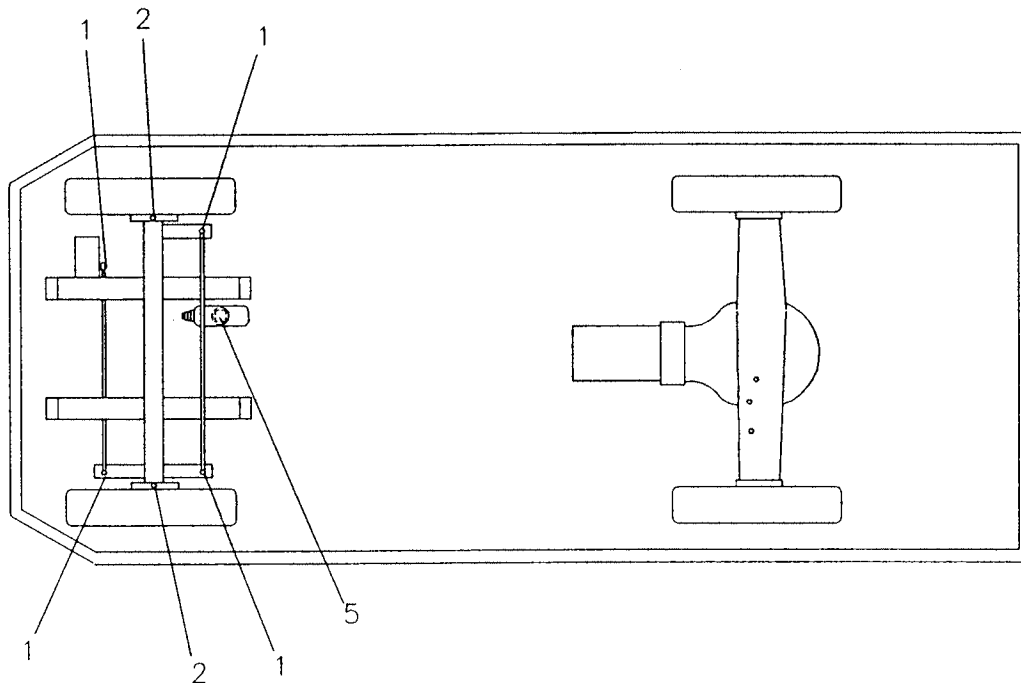
- ◆ Allow only qualified and authorized personnel to maintain, repair, adjust and inspect the vehicle.
- ◆ Before starting any repairs or maintenance immobilize the vehicle by turning the key switch off, removing the key and setting the park brake.
- ◆ Disconnect both of the main battery leads before working on or disconnecting any electrical component or wire.
- ◆ Block the chassis with jack stands before working under a raised vehicle.
- ◆ Conduct vehicle performance checks in an authorized area where safe clearance exists.
- ◆ Before starting the vehicle, follow the recommended safety procedures in Section 2, "Safety Rules and Operational Information."

Severe Duty Inspection: If these vehicles are operated in severe conditions all service procedures should be carried out twice as often as stated in the table on the next page. In addition the vehicle should be inspected monthly for signs of damage and repaired immediately.

SEVERE CONDITIONS refer to extremes in temperature and road conditions.

Periodic Maintenance Checklist					
Maintenance Item	Weekly (20hrs)	Monthly (80hrs)	Quarterly (250hrs)	Semi - Annual (500hrs)	Annually (1000hrs)
Check Condition of Tires	X				
Check and Fill Batteries	X				
Check Brake System		X			
Check Steering System		X			
Lubricate Vehicle			X		
Clean and Tighten All Wire Connections			X		
Wash and Service Batteries			X		
Check Park Brake				X	
Check Front Wheel Bearings				X	
Check Rear Axle Oil				X	
Change Rear Axle Oil					X
Check and Tighten all Nuts and Bolts					X
Clean and Repack Front Wheel Bearings					X

B6-61E LUBRICATION CHART



#	Description	Locations	Lubricant Type
1	Steering Ball Joints	4	General Purpose Grease
2	King Pin	2	General Purpose Grease
3	Differential	1	SAE 140 API GL-5 Hypoid Gear Oil, 2-1/4 qts
4	Gear Case	1	SAE 250 API GL-5 Hypoid Gear Oil, 1pt
5	Master Cylinder	1	DOT 5 Brake Fluid

TROUBLESHOOTING GUIDE

Symptom	Probable Cause
Steering Pulls in One Direction	Front End Out of Alignment
Hard Steering	Dry Lube Points in Steering Linkage
	Damaged King Pin/Ball Joint
Excessive Steering Play	Worn Ball Joints
	Mis-Adjusted or Worn Steering Gear
	Loose Steering Linkage
Lack of Power or Slow Operation	Brakes or Parking Brakes Dragging
	Worn Drive Gears
	Front End Out of Alignment
	Defective Speed Control
Abnormal Noise	Worn Drive Gears or Bearings
	Worn Front /Rear Axle Bearings
	Loose Lug Nuts
	Motor Bearings Worn
Oil Leak in Rear Bearing Area	Rear Wheel Bearing and/or Gasket Failed
	Drive Over Filled
Brake Pedal Soft or Spongy	Air in Brake Lines
Brake Pedal Low	Brake Worn (1/16" Wear Limit)
	Brake Fluid Low
	Brakes Out of Adjustment
Braking Power Low	Brake Worn (1/16" Wear Limit)
	Brake Pads Contaminated with Fluid
	Brake Pedal Linkage Binding
	Brakes Out of Adjustment
	Air in Brake Lines

NOTES

Brakes

B6-61E:

Hydraulic Front Disc and Rear Drum Brakes

Be sure that you are fully aware of the brake system installed on the vehicle you are working on, before continuing.

BRAKE FLUID IS CORROSIVE AND WILL DAMAGE PAINTED AREAS. AVOID SPILLING FLUID ON ANY SURFACE

CAUTION

WARNING

The OEM does not supply asbestos fiber-brake pads/shoes with this or any vehicle. However, there is the possibility that the OEM brake pads/shoes were replaced with those containing asbestos fibers. Since this possibility does exist the brake pads should be handled as if, they do contain asbestos.

Never use an air hose or dry brush to clean brake assemblies. Use an OSHA, approved vacuum cleaner or any alternate method approved by OSHA to minimize the hazard caused by airborne asbestos fibers and brake dust.

Do not grind, sand, brake, or chisel the brake pads/shoes as this will cause unnecessary dust possibly releasing asbestos fibers into the air.

Always wear protective clothing and a face shield when working on the brake pads.

Inhaled asbestos fibers have been found to cause cancer and respiratory diseases.

Do not drive the vehicle if any worn or broken part is detected in any part of the brake system. The cause of the damage must be repaired immediately.

Disc Brakes

The hydraulic disc brakes, available on these vehicles are not adjustable. However, they do need to be periodically inspected, for any possible leaks and to check the wear of the brake pads and, rotors. Follow the procedures below to service these brake systems.



THE BRAKE ROTORS ARE AN INTEGRAL PART OF EACH AXLE AND HUB. IF THE ROTORS ARE DAMAGED OR WORN, THE AXLE OR HUB MUST BE REPLACED. BE SURE TO ALWAYS USE DOT5 SILICONE BASE BRAKE FLUID TO MAINTAIN MAXIMUM CORRSION RESISTANCE.

Brake Pads

To remove and replace the brake pads:

1. Place blocks under the wheels to prevent vehicle movement.
2. Disconnect the main positive and negative terminals from the batteries.
3. Raise either the front or rear of the vehicle, (depending on which set of brakes you are working on,) and support the vehicle with jack stands.

⚠ WARNING

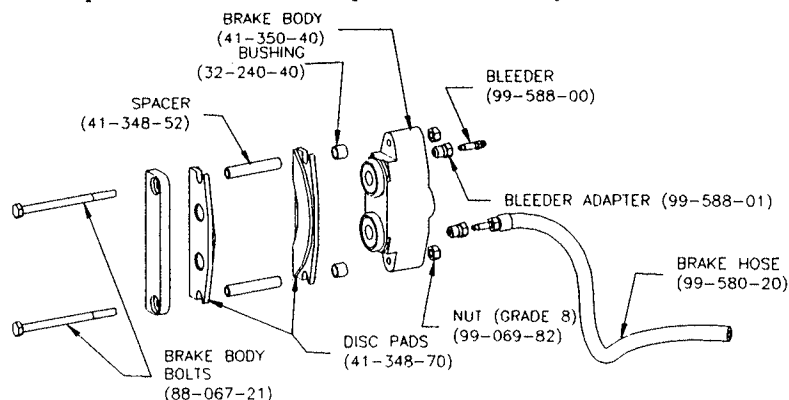
Always use a lifting strap, hoist, and jack stands, of adequate capacity to lift and support the vehicle. Failure to use lifting and support devices of rated load capacity may result in serious injury.

4. Remove the wheels.
5. Remove the two 1/4" brake body bolts (See Brake Figure 1 Below).

⚠ WARNING

Do not let the brake body hang by the brake hose. Support the brake body to prevent damage to the hose.

6. Inspect the spacers for wear and replace as necessary.



Brake Figure 1: Exploded View of Disc Brake Assembly

7. Replace the spacer bushings in the axle retainer bracket.
8. Replace the brake pads and reassemble the brake to the retainer bracket (*See Brake Figure 1 on the previous page*).

⚠ WARNING *Always use new locknuts and bolts. Locknuts and bolts become less effective if used more than once. If the locknuts or bolts holding the brake to the drive come loose, serious injury may occur.*

9. Install new grade 8 locknuts and brake mounting bolts.
10. Tighten the bolts to 11 ft-lbs.
11. Test the brakes to ensure proper installation and braking.

Repairing the Brake Body

1. Remove the brake body. Refer to replacing the brake pads.
2. Carefully remove the two pistons, rubber boots and o-rings.

⚠ WARNING *The pistons are very brittle and break easily*

3. Clean and dry the brake body completely.
4. Make sure there are no contaminants left in the brake body.
5. Inspect the interior of the brake body. If any damage or wear is found it must be replaced.
6. Reassemble the brake body using clean DOT 5-brake fluid as a lubricant.
7. Use tool #41-350-13 to install the rubber boots
8. Install the brake body.

⚠ WARNING *The 1/4" gr. 8 locknuts for the brake body bolts must be replaced.*

9. Tighten the new retaining bolt lock nuts to 11-ft lbs.
10. Bleed the brakes. (*Refer to "Bleeding the Brakes," on page 3-10.*)
11. Lower and test-drive the vehicle.

Section 3

Drum Brakes

This section covers the service and repair of the 12 inch rear drum brakes

Replacing the Brake Shoes

1. Raise the rear end and support it.

⚠ WARNING *Always use jack stands when supporting the vehicle.*

2. Remove the rear wheel.
3. Remove the brake drum.
4. It may be necessary to back off the brake adjuster to remove the brake drum.
5. Inspect the surface of the brake drum and repair or replace as necessary.
6. Remove the brake springs and remove the brake shoes. The brake shoes should be replaced if the lining is within 1/16 inch of any rivet or the backing plate.
7. Remove and disassemble the wheel cylinder.
8. Clean and inspect the wheel cylinder. Repair or replace as necessary. Reassemble the brake in reverse order.

⚠ WARNING *Make sure the rubber cups in the wheel cylinders are square with the bore of the cylinder.*

9. Bleed brake system.
10. Lower the vehicle and test-drive it.

Adjusting the Drum Brakes

Here we will cover how to, adjust the drum brakes after repairing or replacing any of the brake components.

To adjust the drum brakes follow this procedure:

1. Place Blocks under the front wheels to prevent vehicle movement.
2. Disconnect the batteries by removing the main positive and negative cables from the batteries.
3. Raise the rear of the vehicle until the rear wheels no longer touch the ground.
4. Remove the rubber grommet from the access hole on the rear of the backing plate.
5. Using a brake spoon, turn the star wheel until the brakes lock.

HINT: *You should not be able to turn the rear wheel manually, when the brakes are locked.*

6. Then back the star wheel off until the wheel turns freely.
7. Repeat steps four- (4) through six- (6) on the opposite side.
8. Lower the vehicle and slowly drive it to an open area.
9. Back the vehicle and stop it several times. This will allow the auto adjusters in the brakes to make the final adjustments.
10. Test-drive the vehicle.

Section 3

Replacing the Master Cylinder

Before beginning this service or any service read the “**Maintenance Guidelines,**” on page 3-2 and follow each of the bulleted items before continuing.

Make provisions to catch and properly dispose of the brake fluid in the hydraulic brake system.

⚠ WARNING

Avoid ingesting and/or contact with skin or eyes. Always wear protective clothing and a face shield when working with or around brake fluid.

SKIN CONTACT:

Flush area immediately with water for several minutes.

EYE CONTACT:

Immediately flush the eye with water for fifteen (15) minutes and call physician.

INGESTION:

Induce vomiting immediately and call a physician.

KEEP OUT OF REACH OF CHILDREN.

BRAKE FLUID IS CORROSIVE AND WILL DAMAGE PAINTED AREAS. AVOID SPILLING FLUID ON ANY SURFACE.

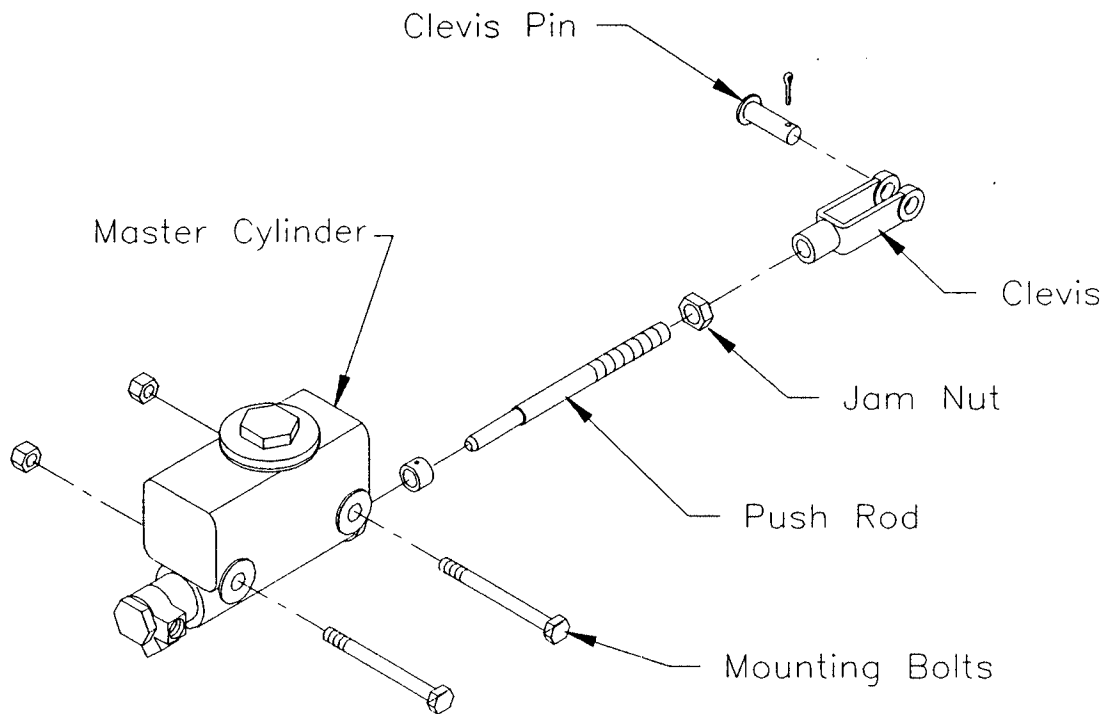
1. Place blocks under the rear wheel to prevent vehicle movement.
2. Disconnect the batteries.
3. Support the front of the vehicle with jack stands.

⚠ CAUTION

Always use a lifting strap, hoist, and jack stands, of adequate capacity to lift and support the vehicle. Failure to use lifting and support devices of rated load capacity may result in serious injury.

4. Remove the cap from the master cylinder and, pump all of the brake fluid from the master cylinder and dispose of it properly.
5. Remove the brake line(s) from the master cylinder fitting.
6. While supporting the master cylinder, remove the mounting bolts.
7. Install the new master cylinder in reverse order.

8. Fill the master cylinder with fresh DOT 5 brake fluid 1/4" from the top of the master cylinder.
9. Bleed the brakes and check for leaks.
10. Check the brake fluid level again and fill as needed.
11. Test drive.



Brake Figure 3: Master Cylinder

Section 3

Bleeding the Brakes

You must bleed the entire hydraulic system to remove any air from the system, after removing brake lines, hoses or the master cylinder. The best way to bleed the brakes is to have one person at the brake pedal, and another person opening and closing the bleeder valve at each wheel.

Before beginning this service or any service read the “**Maintenance Guidelines**,” on page 3-2 and follow each of the bulleted items before continuing.

Make provisions to catch and properly dispose of the brake fluid in the hydraulic brake system.

▲ CAUTION *BRAKE FLUID IS CORROSIVE AND WILL DAMAGE PAINTED AREAS. AVOID SPILLING FLUID ON ANY SURFACE.*



YOU SHOULD START THIS PROCEDURE AT THE WHEEL/BRAKE BODY FURTHEST FROM THE MASTER CYLINDER, AND THEN WORK YOUR WAY TO THE WHEEL/BRAKE BODY CLOSEST TO THE MASTER CYLINDER.

To bleed the brake system, follow these procedures:

1. Add DOT-5 brake fluid to the master cylinder. **(If needed.)**
2. Apply pressure to the brake pedal and pump it once or twice, for maximum pedal height.
3. Attach a clear hose to the bleeder valve.

HINT: *The hose should be long enough to reach the bottom of the drip pan.*

4. With a drip pan under the hydraulic brake body. Loosen the bleeder valve on the hydraulic brake body, about 3/4 of a turn.
5. Depress the foot pedal to the floor and tighten the bleeder valve.
6. Slowly release the foot pedal allowing it to return to its released position.
7. Repeat steps four- (4) through six- (6) until the air is expelled from the line.

HINT: The hose attached to the bleeder valve can be used to check if the air has been expelled from the brake line. Let the end of the hose, rest under the surface of the fluid in the drip pan. When air-bubbles no longer escape from the tube as the pedal is being depressed, then the line is void of air.

8. Check and add brake fluid to the master cylinder as needed
9. Then repeat this process with each of the other wheels.

⚠ CAUTION

Do not allow the fluid level in the master cylinder too get to low, as air may enter the brake lines. Keep the level high by constantly adding fluid

When finished, top off the master cylinder with fluid to 1/4 from the top of the chamber, replace the cover, and clip on the master cylinder.

Section 3

Filling and Checking the Fluid Level

To fill check the brake fluid-level follow these procedures:

1. Clean the cover and exterior of the master cylinder and the surrounding area.
2. Remove the cap from the top of the master cylinder and visually check the level of fluid in the master cylinder.



THE FLUID SHOULD BE 1/4" FROM THE TOP OF THE MASTER CYLINDER'S OPENING. DO NOT FILL THE MASTER CYLINDER PAST THIS POINT AS IT WILL RESULT IN LEAKS.

3. Add DOT 5 Brake Fluid as needed and replace the cap on the master cylinder.

Front Axle and Steering

Axle Removal

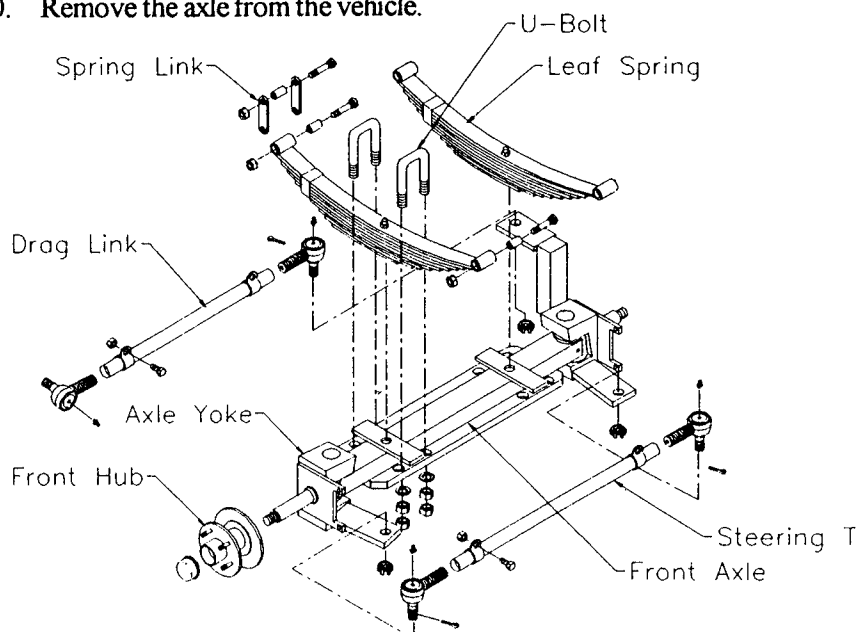
1. Disconnect the batteries.
2. Lift the front end and support with jack stands.
3. Block the rear wheels to prevent the truck from rolling.
4. Remove both front wheels.
5. Disconnect the brake hoses from both the left and right brake bodies.

⚠ CAUTION *Brake fluid will drip from the open brake lines.*

6. Remove the drag link from the steering yoke.
7. Support the front axle with jack stands.
8. Remove the rear leaf spring mounting bolts.

⚠ CAUTION *The front axle is very heavy, be sure to support the axle with additional stands or tie it up to the frame to prevent it from falling.*

9. Remove the front leaf spring mounting bolts, letting the axle rest on the jack stands.
10. Remove the axle from the vehicle.



Section 3
Axle Installation

1. Install in reverse order.
2. Tighten the leaf spring mounting bolts to 40-45 ft. lbs.
3. Tighten the drag link ball joint to 40-45 ft. lbs.
4. Bleed the front brakes and check for leaks.

Aligning the Front End



CASTER AND CAMBER ARE SET AT THE FACTORY AND DO NOT REQUIRE ADJUSTMENT.

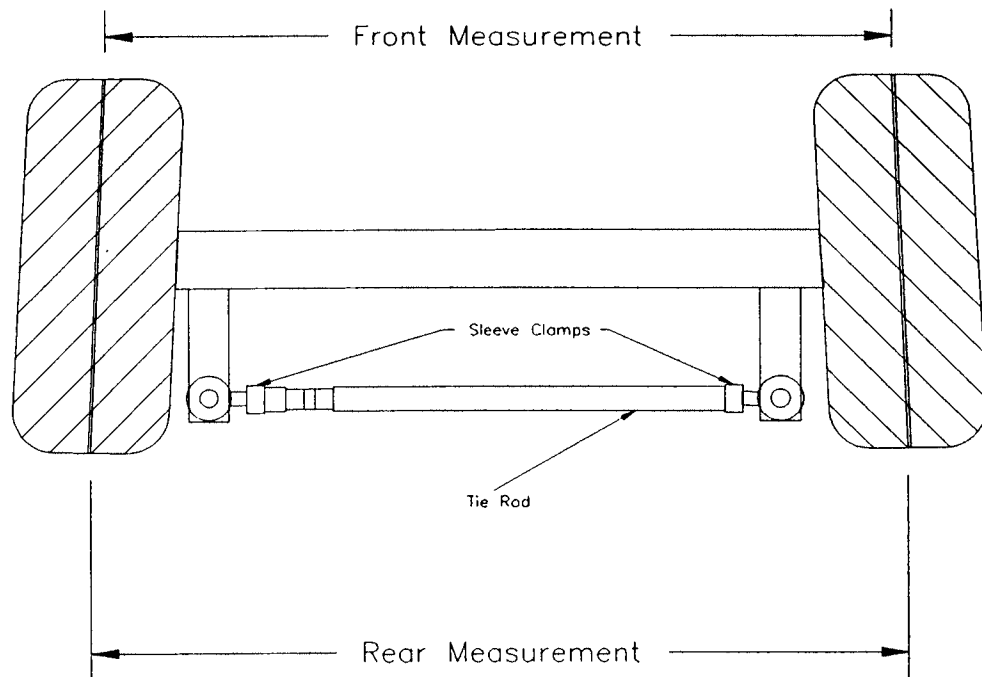
1. Raise the front end of the vehicle and support with jack stands.
2. Center the steering gear and tie it off so that it can not turn.



THE PITMAN ARM SHOULD BE VERTICAL AND THE STEERING PIVOT SHOULD BE PARALLEL TO THE FRONT AXLE BEAM. IF NOT PERFORM THE PROCEDURES IN "CENTERING THE STEERING," ON PAGE 3-22.

3. With a piece of chalk, mark a line around the center of both tires by holding the chalk against the tire while turning the wheel.
4. Loosen the ball joint clamps at each end of the tie rods so the adjusting sleeve can be turned.
5. Lower front end back on the ground.
6. With the wheels in the straight forward direction measure the distance between chalk lines at the front and the rear of the tires.
7. Adjust the tie rod sleeve until the distance from mark to mark across the front of the tires is the same as the distance from mark to mark across the rear.
8. Tighten the ball-joint clamp nuts securely.

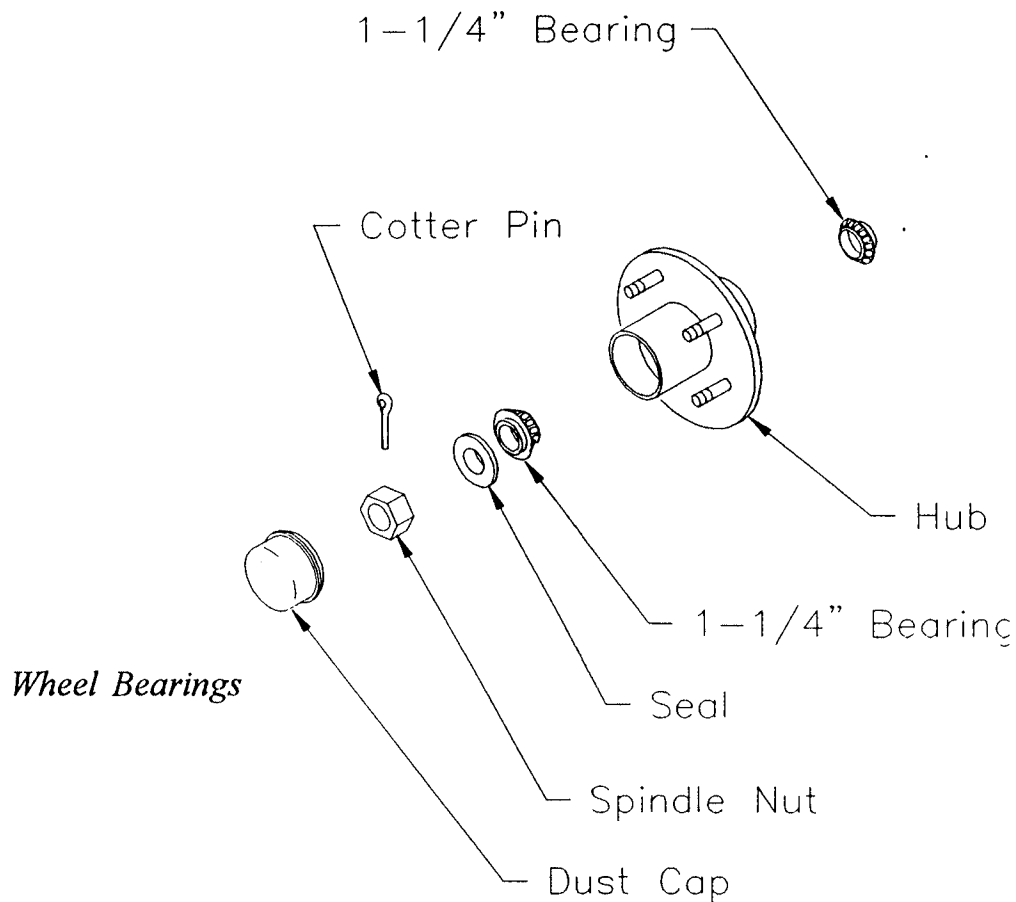
Steering Figure 1: Front End Alignment



Section 3

Centering the Steering

1. Remove the pitman arm from the steering gear.
2. Align the front wheels straight ahead and tie or clamp in position.
3. Center the steering gear.
 - a.) Turn the gear all the way to the left.
 - b.) Turn back three turns, and tie it off so it can not move.
4. Install the pitman arm straight up and down, while keeping the front wheels in the straight-ahead position. Tighten nut to 70-ft lbs.
5. Tighten the Ball Joint clamps securely.
6. Align the steering pivot so that it is parallel to the front axle. Use the drag link to adjust the steering pivots position.
7. Check the alignment of the front end again. Realign if needed. (Refer to "Aligning the Front End", on page 3-20.)



1. Remove the tire/wheel assembly
2. Remove the bearing cap and spindle nut.
3. Remove the hub from the spindle.

⚠ CAUTION *Catch the outer bearing as it falls out*

4. Clean all grease from the inside of the hub and bearings.
5. Inspect and replace the races and bearings as a set.

⚠ CAUTION *It is recommended to replace both the left and right side wheel bearings at the same time.*

6. Assemble in reverse order, using new grease seals.
 - a.) Pack inner and outer bearings with grease.
 - b.) Tighten the spindle nut to 30-ft. lbs. while rotating the hub to seat bearings.
 - c.) Back off spindle nut to the first slot. Then install a new cotter pin.
7. Install the bearing cap.

Section 3

Ball Joints



IT IS RECOMMENDED TO REPLACE ALL THE BALL JOINTS AS A SET.

1. Loosen the ball joint clamp. Note its position on the sleeve.
2. Remove the ball joint nut, and then remove the ball joint using a pickle fork.
3. Count the number of turns while removing the ball joint from the drag link or tie rod.
4. Lightly lubricate the threads on the new ball joint and install into the drag link or tie rod counting the same number of turns as when removed.
5. Install the ball joint into the steering arm and tighten nut to 40-45 ft lbs. Use a NEW cotter pin.
6. Lube the new ball joint.
7. Realign the front wheels.
8. Tighten the ball joint clamps securely.

⚠ CAUTION

Make sure the clamps are in their original position noted in step 1. Turn the steering all the way from left to right to make sure there is no interference.

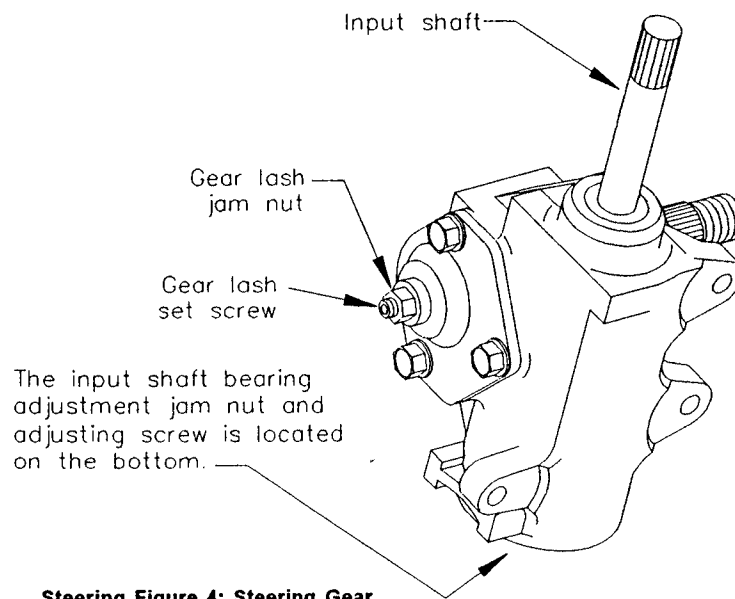
Steering Gear Adjustment

Endplay

1. Loosen the input shaft bearing adjustment jam nut.
2. Tighten the adjusting nut so that there is no endplay or wobble in the input shaft.
3. Tighten the jam nut.

Gear Lash

1. Remove the pitman arm. Note its position.
2. Loosen the jam nut for the gear lash set screw.
3. Tighten the set screw so that there is a slight drag when the steering gear passes through the center of its travel (about three- (3) turns from lock).
4. Tighten the jam nut. Do not allow the setscrew to turn while tightening.
5. Install the pitman arm in its original position. Tighten to 70-ft. lbs.



A MORE DETAILED FIGURE OF THE STEERING GEAR IS AVAILABLE ON PAGE 3-28.

Section 3

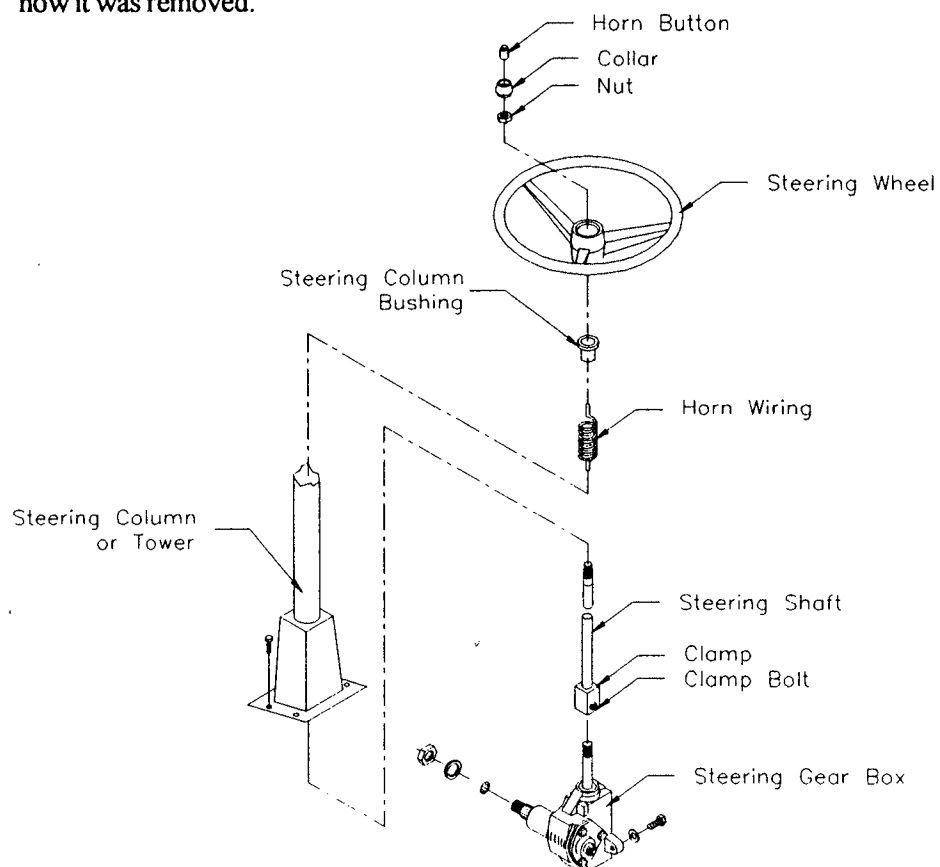
Steering Column

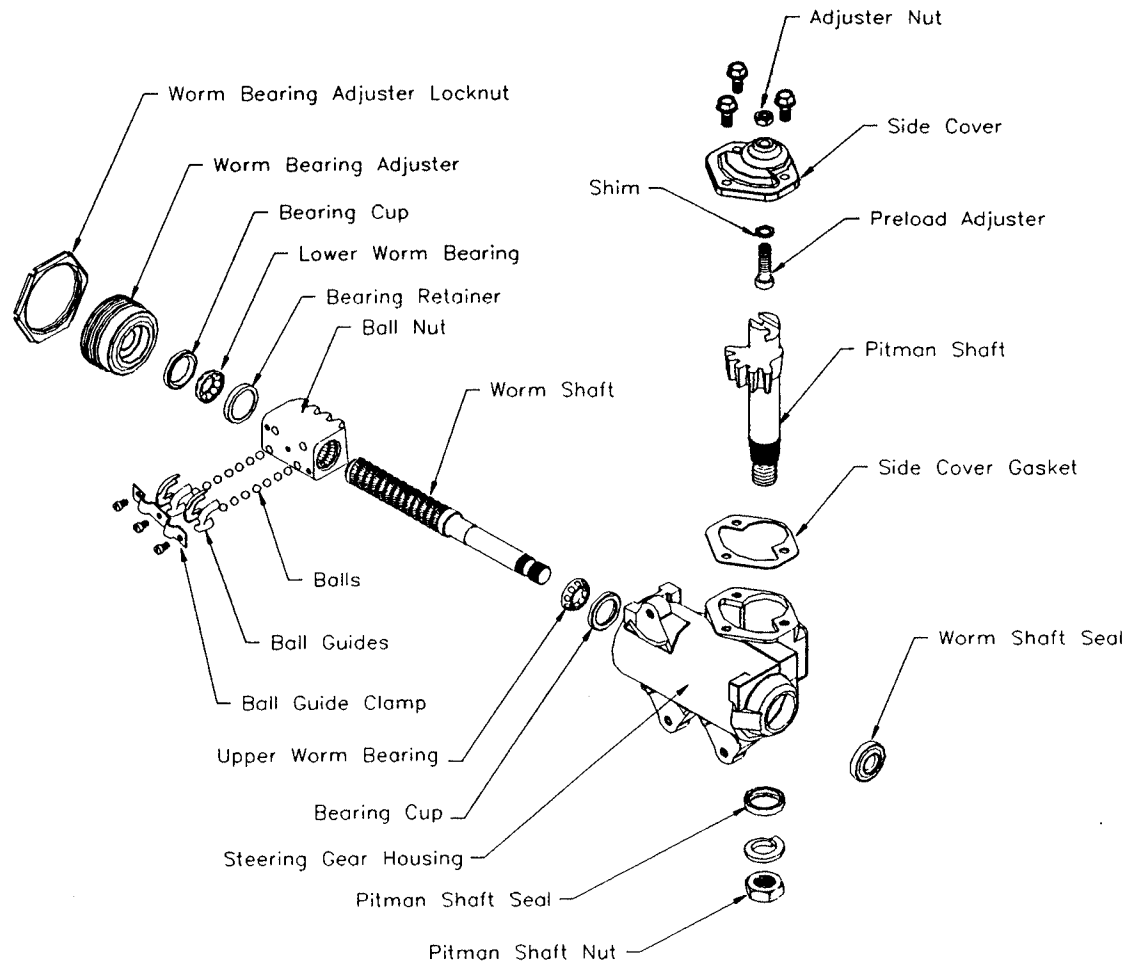
Removal

1. Remove the steering wheel.
2. Disconnect the horn wire .
3. Remove the cover from the steering cloumn tower and loosen the clamp bolt holding the steering shaft to the input shaft of the steering gear.
4. Secure the steering column in place and remove the bolts holding the column to the floor. Now you can remove the entire steering cloumn assembly from the vehicle.

Installation

1. Refer to the procedure above and install the steering column in reverse order from how it was removed.





Exploded View of Steering Gear

NOTES

Rear Axle

This vehicle is equipped with a highly effective full floating direct drive assembly. It employs an automotive type differential unit which operates within an enclosed housing. The gears, bearings, etc., are lubricated from within by oil which when maintained at the proper level insures complete coverage of all moving parts. Refer to the lubrication chart and diagram on page 3-4.

WARNING

When performing maintenance on any part of this vehicle, disconnect the main battery leads, place the forward/reverse switch in the neutral or off position, remove the key from the key-switch. Read all warnings and cautions and refer to the maintenance guidelines on page 3-2.



REFER TO THE FIGURE ON PAGE 3-33 FOR ALL OF PROCEDURES COVERED IN THIS SECTION. FOR MORE DETAILED DRAWINGS, REFER TO THE ILLUSTRATED PARTS SECTION LOCATED AT THE REAR OF THIS MANUAL.

Removal

To remove the rear axle and drive assembly from follow the procedures below:

1. Disconnect the battery leads.
2. Tag all motor leads and remove them from the motor.
3. Disconnect the brake rod from the brake arm.
4. Loosen the locknut and release the spring tension by unscrewing the turn buckle.
5. Disconnect the hydraulic brake line at the hose end.
6. Remove the shackle bolts attaching the springs to the frame.
7. Remove the spring eye anchor bolts.
8. Remove the axle and drive assembly from the vehicle.

Installation

To install a new drive and axle assembly or to install a repaired drive and axle assembly simply reverse the steps in "Removal."

Section 3

Axle Shaft Removal

1. Disconnect the battery leads.
2. Raise the rear of the vehicle and support with jack stands.
3. Remove the axle shaft stud nuts and lock washers.
4. Strike the center of the axle shaft flange with a hammer and drift to loosen the tapered dowels.
5. Remove the dowels.
6. Remove the axle shaft from the housing.

Bearing or Oil Seal Replacement

1. Disconnect the battery leads.
2. Remove the outer seal from the axle shaft flange studs.
3. Bend the lockwasher tab away from the locknut and remove the locknut, lockwasher, and adjusting nut.
4. With a wheel jack, raise the wheel to the point that all wheel weight is removed from the wheel bearing.
5. Remove the outer bearing and pull the wheel straight off the axle.
6. With a piece of hard wood which will just clear the outer bearing cup drive the inner bearing and inner seal out of the wheel hub.
7. Clean all the old grease out of the wheel hub.
8. Inspect the bearing races and rollers for pitting, erratic wear patterns and damage. Replace as needed.
9. If the bearing cup is to be replaced, drive them out with a drift.
10. Check for proper seating of new cups by trying to insert a .00156 inch feeler gauge between the cup and the hub.
11. A ring of wheel bearing grease as high as the cup should be placed on each side of both cups. This forms a dam which prevents thinned grease from flowing out of the bearing.
12. Pack each bearing cone and roller assembly.
13. Place the inner bearing in the wheel hub and install a new inner seal.
14. Adjust the wheel jack so the wheel can be installed straight on the housing without damaging the inner seal.
15. Install the outer bearing and start the bearing adjuster nut.

16. Turn the adjuster nut in and torque the nut to 50 to 80 ft. lbs. while rotating the wheel.
17. With the bearing rollers firmly seated, back off the nut $\frac{3}{8}$ of a turn and install the lockwasher.
18. If the adjusting nut is equipped with a locking dowel, make sure that the dowel enters the lockwasher hole which closely aligns with the dowel.
19. If the lockwasher is equipped with tabs, run the locknut against the lockwasher and bend the tabs over the adjusting nut.
20. Torque the locknut to 100-150ft. lbs.

Axle Shaft Installation

1. Install the seal and gaskets onto the axle shaft studs.
2. Install the axle shaft, tapered dowels, lockwashers and axle shaft flange nuts.
3. Adjust the brakes.

Replacing the Axle Assembly

1. Remove the rear axle assembly from the vehicle. Refer to "Removal," on page?

Section 3

Disassembly of Differential Carrier

1. Remove the axle shafts as outlined previously, axle shafts may be pulled out only far enough to clear the differential side gears.
2. Drain lubricant and rear cover.
3. Make sure the differential side bearing caps and axle housing are marked then remove the side bearing caps.
4. Pry differential housing.
5. Remove the side bearing cups.
6. Pull off the side bearing and adjuster shims, tagging shims for identification on reassembly.
7. Unfasten ring gear case.
8. Drive out the differential pinion shaft pin and pull out the shaft, pinions and side gears.
9. Hold companion flange from turning and remove the flange nut.
10. Remove the motor and gear case plate.
11. Remove driven gear from pinion shaft.
12. Remove the pinion from the carrier by tapping on the front end with a soft hammer.
13. Remove the pinion shaft.
14. Remove the pinion shaft bearings from the carrier, keeping separate the shim pack at each bearing.

Replacing the Pinion and Bearings

If the original ring gear and pinions are being used in the original carrier, use the original shim packs for each bearing. If a new pinion or differential is installed, note the markings on the end of the pinion gear and the differential carrier to obtain the correct thickness of shims to be used with these parts. The shims behind the rear bearing establishes the correct pinion depth.

1. Press the rear pinion bearing cup on the housing with the proper shims installed.
2. Press the rear pinion on to the shaft.
3. Install the front bearing cup and shims and front bearing.
4. Install the driven gear.
5. While holding the flange from turning, torque the nut to 200 - 220 ft. lbs.
6. Check the pinion bearing pre-load with a spring scale and heavy cord wrapped around the driven gear. Pull the spring scale. The torque required to rotate the pinion 2 to 5 inch lbs. If not within these limits, add or remove shims from behind the front bearing to obtain the proper pre-load.
7. Remove the driven gear and install a new oil seal, flat side toward the differential. Reinstall the driven gear and tighten the nut to a torque of 200 - 220 ft. lbs.
8. Replace the driven gear pinion flange and replace the motor and gear case plate with gear case bolts.

Replacing the Ring Gear

1. Install guide pins in every other hole in the ring gear. These pins can be made from 1-1/2" long cap screws with the heads cut off and the ends slotted.
2. Make sure back face of ring gear and face of cases are free from dirt and burrs and slip gear over pilot diameter of case.
3. Install every other ring gear bolt. Draw them up evenly and snugly so the ring gear face is flush with the face of the case.
4. Remove guide pins and install remaining bolts.

Section 3

Assembly of Differential Carrier

The differential bearings are adjusted by shims. These shims also establish the ring gear position with the pinion. Therefore, backlash must be checked whenever a bearing adjustment is made.

The correct bearing adjustment is one which will provide a .001 - .002 pinch fit when the differential is assembled into the carrier. To make the adjustment, install the bearing cones without shims and place the assembly in the housing with the bearing cups. Force the unit to one side and check the clearance between the bearing cup and the differential case with a feeler gauge. When the clearance is determined, select shims of this amount plus .001 - .002" extra to establish the proper load. Remove the differential bearings again and divide the shims into two equal packs and install them on each side and replace bearings.

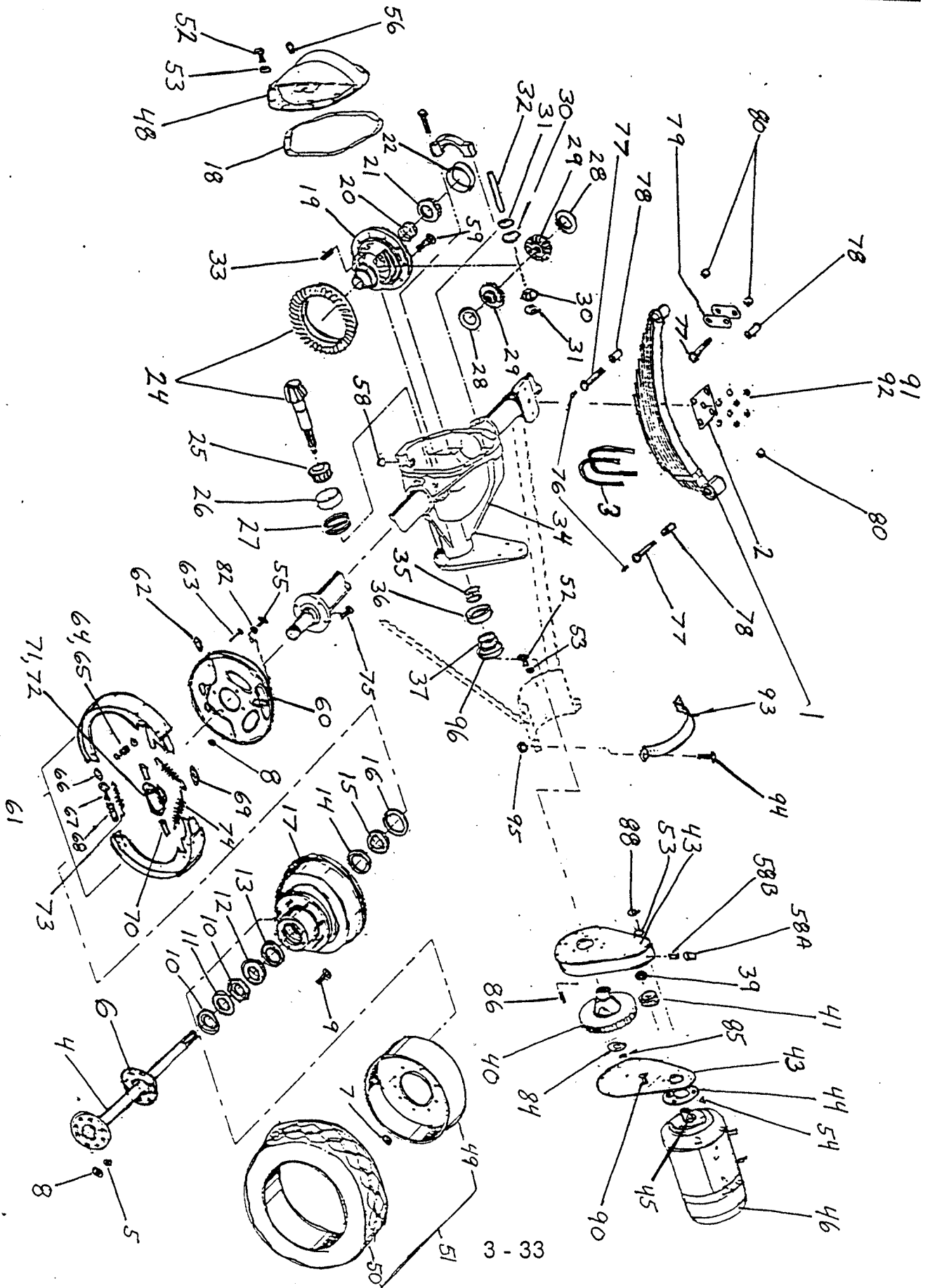
Reinstall the unit in the carrier. This operation is made easier by cocking the bearing cups slightly when the differential is placed in the housing and then tapping them lightly with a mallet. However, when installing the differential in the housing be sure the ring gear teeth mesh with the pinion teeth before tapping the bearings in place. After the bearing cups are firmly in place, install the bearing caps. The bearing caps and gaskets surface of the housing are marked with the horizontal numeral and on the side by a vertical numeral. The position of the numerals should correspond when reinstalling the bearing caps.

Adjusting the Ring Gear and Pinion Backlash

Mount a backlash gauge indicator on the carrier and start checking for the correct backlash between the ring gear and pinion. If the backlash is not within the limits of .004" to .011" it will be necessary to change the arrangement of the shims back of the bearings. Make the correction in backlash bearing in mind that shims removed from one side must be installed on the opposite side so that the total shim thickness of the right and left side will remain unchanged, and the bearing adjustment undisturbed.

Gear Replacement (Spur Gear Reduction)

Remove five 5/16 bolts and nuts and the three 3/8 bolts. This will allow the gear case to come apart. To remove the pinion gear, remove the nut and use a gear puller to pull the gear off. Replace new gear and lock down with nut. To replace the driven gear, remove bolt and slide off splined shaft. To replace new gear slip over spline and lock down nut.



**MAINTENANCE AND SERVICE
PROCEDURES**

Section 3

FIG. I.D. NO.	T-D PART NO.	DESCRIPTION	QTY. REQ.
5-1	85-503-00	9 Leaf Spring Assembly	2
5-2	16-867-00	Spring Plate	2
5-3	96-111-00	U-Bolt	4
5-4A	41-150-00	Axle, Rear, 16 Tooth Spline	2
5-4B	41-150-50	Axle, Rear, 30 Tooth Spline	2
5-5	95-450-00	7/16 I.D. Tapered Dowel	16
5-6	45-043-00	Gasket, Axle to Hub	2
5-7	97-236-00	1/2 N.F. Lug Nut	16
5-8	88-130-86	7/16 N.F. Lock Nut, Fiber Insert 7/16 NF	24
5-9	96-332-00	Wheel Stud	16
5-10	41-870-00	Hub Outer Bearing Lock Nut	4
5-11	41-871-00	Hub Outer Bearing Lock Washer	2
5-12	80-529-00	Hub Outer Bearing	2
5-13	80-134-00	Hub Outer Bearing Race	2
5-14	80-135-00	Hub Inner Bearing Race	2
5-15	80-530-00	Hub Inner Bearing	2
5-16	45-337-00	Hub Seal	2
5-17	12-225-00	Hub Assy. w/Drum Bearing Race & Studs	2
5-18	45-041-00	Gasket	1
5-19	41-873-52	Differential Carrier Assy.	1
5-20	16-419-00	Spacer, .002 Thick	1 to 5
5-20	16-411-00	Spacer, .005 Thick	1 to 5
5-21	80-531-00	Tapered Roller Bearing (Carrier)	2
5-22	80-136-00	Bearing Race (Carrier)	2
5-23	80-140-17	1/2 x 2-1/4 NC Hex Head Cap Screw	4
5-24B	31-243-10	Ring & Pinion Gear Set, 6.17 Ratio 29 Tooth Spline	1
5-25	80-532-00	Tapered Roller Bearing (Rear Pinion)	1
5-26	80-137-00	Bearing Race (Rear Pinion)	1
5-27	16-419-00	Spacer, .002 Thick	1 to 5
5-27	16-411-00	Spacer, .005 Thick	1 to 5
5-28	41-877-00	Differential Gear Washer (Axle)	2
5-29A	41-878-00	Differential Gear (Axle), 16 Tooth Spline	2
5-29B	41-878-10	Differential Gear (Axle), 30 Tooth Spline	2
5-30	41-879-00	Differential Gear (Pinion)	2
5-31	41-880-00	Differential Gear Washer (Pinion)	2
5-32	41-881-00	Differential Gear Shaft	1
5-33	41-701-00	Pin (Differential Shaft Lock)	1
5-34	41-883-12	Housing Complete w/Gears Less Axles and Brakes	1

FIG. I.D. NO.	T-D PART NO.	DESCRIPTION	QTY. REQ.
5-35	41-884-51	Shim (.003 Thick)OPinion Bearing Shaft	1
5-35	41-884-52	Shim (.005 Thick))Pinion Bearing Shaft	1
5-36	80-138-00	Front Pinion Bearing Race	1
5-37	80-533-00	Front Pinion Bearing.	1
5-39	97-241-00	3/4 NF Hex Head Jam Nut	1
5-40A	31-202-10	84 Tooth Spur Gear, 10 Tooth Hub Spline	1
5-40B	31-202-12	84 Tooth Spur Gear, 29 Tooth Hub Spline	1
5-40C	31-206-10	67 Tooth Spur Gear, 10 Tooth Hub Spline	1
5-40D	31-206-12	67 Tooth Spur Gear, 29 Tooth Hub Spline	1
5-41	31-229-00	17 Tooth Gear (goes w/84 Tooth Gear)	1
5-41	31-232-00	17 Tooth Gear (goes w/67 Tooth Gear)	1
5-42	45-000-00	Gear Case Cover Gasket	2
5-43	43-200-10	Gear Case and Cover Set	1
5-44	45-010-00	Motor Gasket	1
5-45	45-507-00	Shaft Oil Seal	1
5-46	70-061-00	Motor, 5 H.P., 2800 RPM, 36 Volt, G.E.	1
5-48	41-872-00	Carrier Cover	1
5-49	12-055-00	Cast Wheel for 18 x 5 x 14 Solid Cushion Tire	2
5-49	12-056-00	Cast Wheel for 21 x 5 x 15 Solid Extra Cushion Tire	2
5-50	10-262-00	Tire, Solid Cushion 18 x 5 x 14 (Smooth)	2
5-50	10-263-00	Tire, Solid Extra Cushion 21 x 5 x 15 (A.W.)	2
5-51	13-957-10	Tire & Demountable Wheel 18 x 5 x 14	2
5-51	13-958-10	Tire & Demountable Wheel 21 x 5 x 15 Solid Extra Cushion Tire	2
5-52	88-100-09	3/8 x 3/4 NC Hex Head Cap Screw	12
5-53	88-108-62	3/8 Lock Washer	12
5-54	97-100-00	3/16 Woodruff Key	1
5-55	88-080-09	5/16 x 3/4 NC Hex Head Cap Screw	4
5-56	41-885-00	Fill & Drain Plug - Recessed Head/Magnetic	2
5-58	41-989-00	Level or Drain Plug	2
5-58A	41-986-00	Filler Cap, Vented	1
5-58B	41-987-00	Riser Pipe	1
5-59	88-151-12	1/2 x 1-1/8 NF Hardened Hex Head Cap Screw	12
5-60	41-341-00	Brake Backing Plate for either Wheel	2
5-61	41-669-00	Brake Shoe Set for Two Wheels	1
5-62	41-684-00	Brake Adjustment Hole Cover	2
5-63	41-676-00	Anchor Rod Brake Shoe Backing Plate	4
5-64	41-677-00	Retainer Washer, Brake Shoe Backing Plate Anchor	8
5-65	85-070-00	Spring Brake Backing Plate Anchor (Fuchsia Color)	4
5-66	41-311-54	Brake Adjustment Socket	2
5-67	41-311-52	Brake Adjustment Screw	2

**MAINTENANCE AND SERVICE
PROCEDURES**

Section 3

FIG. I.D. NO.	T-D PART NO.	DESCRIPTION	QTY. REQ.
5-68	41-311-53	Brake Adjustment Nut	2
5-69	41-681-00	Top Shoe Retainer Plate	2
5-70	41-683-00	Wheel Cylinder Push Rod	4
5-71	99-503-99	Wheel Cylinder Right Side, Thru Serial #46488	1
5-71	99-505-99	Wheel Cylinder Right Side, Serial #46489 & UP	1
5-72	99-503-98	Wheel Cylinder Left Side, Thru Serial #46488	1
5-72	99-505-98	Wheel Cylinder Left Side, Serial #46489 & UP	1
5-73	85-209-00	Bottom Shoe Spring (Brown Color)	2
5-74	85-211-00	Top Shoe Spring (Red Color)	4
5-75	41-682-00	Backing Plate Mounting Bolt	8
5-76	87-071-00	Grease Fitting - 3/16 Drive Type	8
5-77	96-244-00	Shackle Bolt	8
5-78	32-213-00	Nylon Bushing	8
5-79	16-873-00	Shackle Strap	6
5-80	88-169-81	Lock Nut - 9/16" NC (Hex)	8
5-81	88-527-11	Cotter Pin - 1/8" x 1"	8
5-82	88-088-62	5/16 Lock Washer	5
5-83	88-089-80	5/16 NC Hex Head Nut	5
5-84	88-268-61	7/8 SAE Washer	1
5-85	88-279-81	7/8 NF Hex Head Lock Nut	1
5-86	88-617-09	3/8 x 3/4 Dowel Pin	2
5-87	88-080-20	5/16 x 3 NC Hex Head Cap Screw	5
5-88	88-101-20	3/8 x 3 NC Hex Head Cap Screw	3
5-89	88-108-62	3/8 Lock Washer	3
5-90	88-103-09	3/8 x 3/4 NC	
5-91	88-168-62	9/16 Lock Washer	8
5-92	88-179-85	9/16 NF Castle Nut	8
5-93	50-457-00	Motor Anchor Strap - G.E.	1
5-94	88-101-16	3/8 NC x 2 Hex Head Cap Screw (H.T.)	2
5-95	88-109-87	3/8 NC Fastite Nut	2
5-96	K9-116-10	Oil Seal, Serial No. 46489 & 46490	1
5-96	45-332-00	Oil Seal, Serial No. 46491 and Up	1

Drive Motor

Replacing the Brushes

1. Remove the Brush covers.
2. Remove the brush wire from the brush holder.
3. Pull the brush straight out from the brush holder.

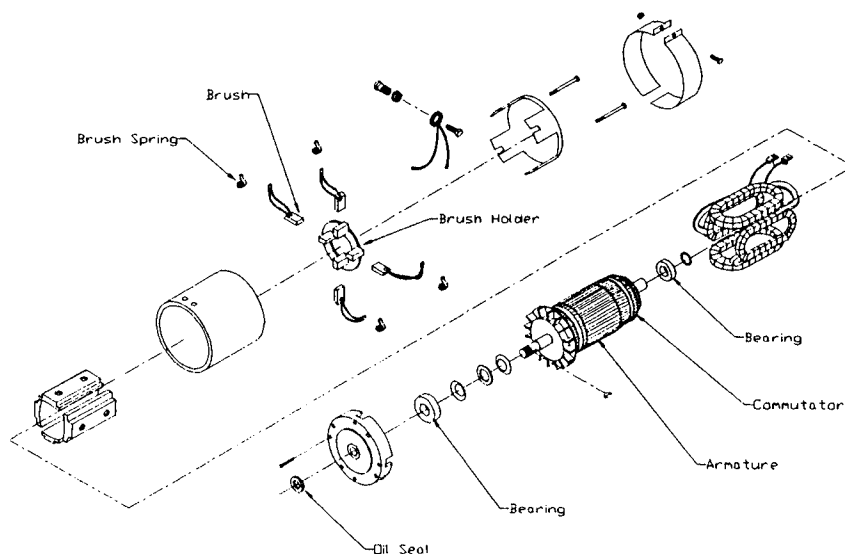


HOLD THE SPRING SO IT DOES NOT SNAP BACK DOWN INTO THE HOLDER.

4. Install in reverse order.



70-061-00 MOTOR-MINIMUM BRUSH SERVICE LENGTH IS .75".



Drive Motor Figure 1: Exploded View of Drive Motor

Inspecting the Armature

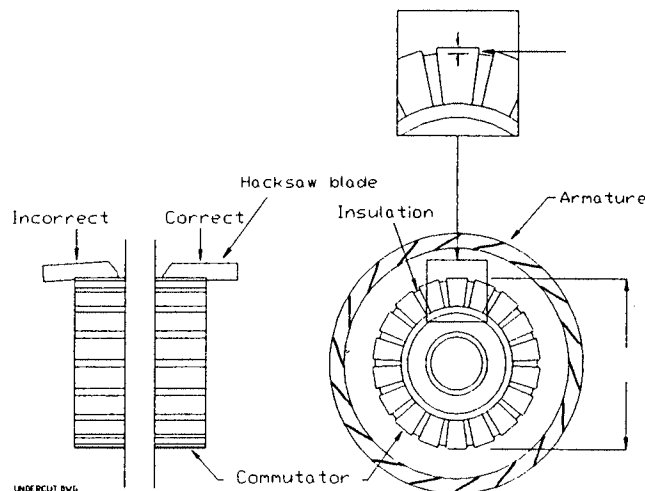
1. If any solder has been thrown from the armature the motor must be replaced.



CHECK THE INSIDE OF THE MOTOR HOUSING AROUND THE COMMUTATOR FOR BITS OF SOLDER.

2. If the commutator is grooved it must be cut on a lathe.
3. Measure the undercut on the commutator.
 - a.) If less than .025" then the mica must be undercut. *See Drive Motor Figure 1 on the previous page.*
4. Measure the commutator diameter.
 - a.) If less than 2.625" then the armature is worn out and the motor must be replaced.
5. Spin the bearings by hand.
 - a.) If any vibration or roughness is felt, they must be replaced.

HINT: It will require a press to replace the bearings.



Drive Motor Figure 2: Undercut dwg

Battery

⚠ WARNING

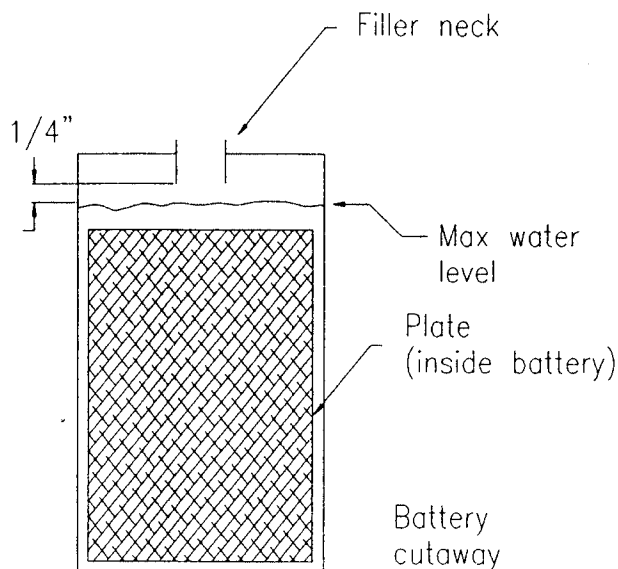
Battery electrolyte is poisonous and dangerous. It contains sulfuric acid. Avoid contact with skin eyes or clothing. Wear rubber gloves and safety glasses while servicing batteries. DO NOT INGEST!

⚠ WARNING

Batteries produce an explosive gas when charging. DO NOT SMOKE, produce an open flame or spark while checking or servicing a battery.

Cleaning

1. Dry dirt can be readily blown off with low-pressure air or brushed off.
2. Wetness or wet dirt on the covers indicates battery acid. Using a nonmetallic brush with flexible bristles wash it off with a strong solution of baking soda and hot water (1 lb. of soda to gallon of water). Continue until all fizzling stops, which indicates that the acid has been neutralized. Then rinse thoroughly with clear water. DO NOT get any of the solution into the battery cells.



Battery Figure 1: Electrolyte Level

Section 3
Servicing

1. Check the electrolyte level in all batteries. If low fill with distilled water up to the correct level (*See Battery Figure 1: Electrolyte Level on the previous page*).

⚠ CAUTION *Do not overfill the battery. An overfilled battery may leak acid.*

2. Clean the battery (*See Battery Cleaning on the previous page.*)
3. Clean the cell posts connectors and battery box with water.

Charging

⚠ WARNING *Explosive mixtures of Hydrogen gas are present within battery cells at all times. Do not work with or charge battery in an area where open flames (including gas furnace or water heater pilots), sparks, cigarettes, or any other sources of combustion are present. Always provide ample ventilation in rooms where batteries are being charged.*

To charge the batteries do the following:

1. Check the electrolyte level. If low, fill with distilled water up to the correct level (see diagram).
2. Park the vehicle in an approved area for charging and plug the charger in.
3. Allow the charger to cycle completely before unplugging.

Battery Storage

The following pointers will help extend the life of the battery when storing your vehicle for the winter season:

- Clean and check the electrolyte level and charge level of the battery. Do not store a battery low in electrolyte or in a low state of charge.
- Recharge a battery not in use every 1 to 2 months.
- If possible, store the vehicle in a cool dry place.

If the batteries are removed from the vehicle, do not place them directly on the ground, concrete or solid metal surface. It is recommended to store them on a wooden pallet or equivalent.

Section 3
Tires

Servicing the Tires

The B6-61E is equipped with 21 X5 1 and 18 X 5 solid cushion tires (standard). The tires should be checked as follows:

1. Check the tires for nicks or grooves and replace if necessary.
2. Ensure that the tire is properly seated on the rim.
3. Check wheel nuts for tightness.

Electrical Troubleshooting

TOOLS NEEDED:

Volt-OHM meter

Test light (voltage equal to MAX battery voltage)

9/16" combination Wrench

1/2" combination Wrench

62-027-31 Test Harness

- *All voltage tests done referenced to battery negative unless otherwise specified.*
- Battery volts = full voltage available at batteries at time of test.*
- *All tests key switch on. Safety switches (if equipped) on.*
- This test procedure must be performed in the order it was written. If you start in the middle or skip sections, you may not get the proper results.*
- *When "BATTERY volts" is specified it indicates the current full voltage available at the batteries*
-
-
- ***DURING ALL TESTS***
- BOTH DRIVE WHEELS JACKED UP OFF THE GROUND, SUPPORTED BY JACK STANDS WITH FRONT WHEELS***
- ***BLOCKED.***
- After any repairs are made completely test vehicle BEFORE lowering to ground.*

START: IF THE TRUCK RUNS IN ONLY ONE DIRECTION THEN GO TO CONTACTORS

➤ CONTROL WIRES AT PMC

1. With the Accelerator pedal depressed to engage MS1 only (creep speed) and the directional switch in gear (forward or reverse).
 - a.) Test volts at PIN #2 on the PMC. If it is not 6-6.5V, then GO TO ACCELERATOR MODULE.

Section 3

- b.) Test volts at PIN "KSP" on the PMC. If not BATTERY volts then GO TO KSI.

2. With the accelerator, pedal fully depressed.

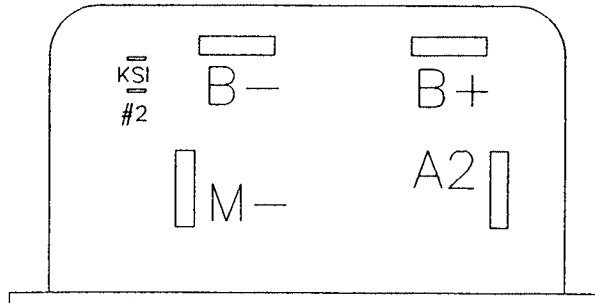
- a.) Test volts at PIN #2 on the PMC. If not 11-11.5V, then GO TO ACCELERATOR MODULE.

➤ POWER WIRING

➤ *NOTE: All tests in this section are with the resistor at the ISO solenoid disconnected. Reconnect the resistor when done with this section.*

1. With the accelerator pedal depressed to engage MS1 only (creep speed).

- a.) Test volts from BATTERY NEG to "B+" on the PMC. If not BATTERY volts then GO TO CONTACTORS
- b.) Test volts from "B+" on the PMC to "B-" on the PMC. If not BATTERY volts then check the wire and connections from BATTERY NEG to "B-" on the PMC. >STOP
- c.) Using ohmmeter (R*10), check the ISO resistor. If not 250 ohms replace resistor.



➤ *NOTE: A defective resistor causes intermittent operation of control.*

2. Reconnect the resistor.
3. With the accelerator pedal depressed fully.
 - a.) Test volts from "M-" on the PMC to "B+" on the PMC. If not BATTERY volts then the PMC is bad. >STOP
 - b.) Connect the test light across MOTOR S1-S2 terminals. If the light is ON then the field is open. >STOP
 - c.) Connect the test light across MOTOR A1-A2 terminals. If the light is ON then the armature is open. >STOP

GO TO CONTACTORS

➤ ACCELERATOR MODULE (MAGNETIC OR SOLID STATE ONLY)

➤ *Note: These tests are done at the accelerator using the 62-027-31 test harness.*

1. With the accelerator pedal depressed to engage MS1 only (creep speed).

- a.) Test volts at PIN #4. If not BATTERY volts then GO TO KSI
- b.) Test volts from PIN #4(+) to PIN #9(-). If not BATTERY volts then check the wire (pin #9 to circuit breaker), circuit breaker. >STOP
- c.) Test volts at PIN #2. If not 6-6.5V, then the accelerator module is bad. >STOP
- d.) Test volts at PIN #5. If not BATTERY volts then the accelerator module is bad. >STOP

➤ *NOTE: A broken return spring will cause no output at PIN #5.*

2. With the accelerator, pedal fully depressed.

- e.) Test volts at PIN #2. If not 11-11.5V, then the accelerator module may need adjusting or is bad. >STOP

- f.) If volts at MODULE (PIN #2) are good but at PMC (PIN #2) are bad then check the wire in pin #2 from the module to the PMC. >STOP



NOTE: Some models route wire #2 through a seat switch.

➤ KSI

1. Check the KEY-switch and/or safety interlock switches (if equipped) for continuity.

- a.) Some models route the key switch through the F&R switch
- b.) Check control wiring. >STOP

CONTACTORS

Using ohmmeter (Rx10), check the ISO resistor. If not 250 ohms, replace the resistor.

➤ *NOTE: A defective resistor causes intermittent operation of control.*

If FORWARD only then GO TO FORWARD ONLY

If REVERSE only then GO TO REVERSE ONLY

- 1. Place the directional switch in neutral.
- 2. If the ISO solenoid clicks when the accelerator pedal is depressed then GO TO ISO
- 3. Test volts from BATTERY positive to the ISO coil negative.
 - a.) If not BATTERY volts then check the negative control wiring and the

Section 3

circuit breaker. >STOP

4. With the accelerator, pedal fully depressed.

- a.) Test volts across the ISO coil. If not BATTERY volts then check the wiring, MS1, safety switches, KEY-Switch. >STOP

Test volts across the ISO coil. If BATTERY volts then the ISO coil is bad. >STOP

➤ **ISO**

1. Connect the test light across the ISO power contacts and depress the accelerator pedal fully.
 - a.) If the light is on then the ISO solenoid is bad. >STOP
 - b.) If the light is off then check the power wiring to the batteries and to the PMC for opens. >STOP

➤ **FORWARD ONLY**

1. Place the directional switch in NEUTRAL.
2. Depress the accelerator pedal. Move the directional switch to reverse.
 - a.) If the REVERSE solenoid clicks then GO TO forward contacts.
 - b.) Check volts from BATTERY positive to the negative coil terminal on the REVERSE solenoid. If not BATTERY volts then check the solenoid bus bar connections. >STOP
 - c.) Check the voltage across the REVERSE solenoid coil.
 - i.) If BATTERY volts then the REVERSE solenoid is bad. >STOP
 - ii.) ➤ **FORWARD CONTACTS**

➤ **FORWARD CONTACTS**

CONNECT THE TEST LIGHT ACROSS THE NORMALLY CLOSED CONTACTS OF THE FORWARD SOLENOID

1. Depress the accelerator pedal fully.

If the light is on then the FORWARD solenoid is bad. >STOP

CONNECT the test light ACROSS the normally open contacts of the REVERSE SOLENOID

2. Depress the accelerator pedal fully.

If the light is on then the REVERSE solenoid is bad. >STOP

3. If the light did not come on, check all power wiring for opens. >STOP

➤ **REVERSE ONLY**

Place the directional switch in NEUTRAL.

1. Depress the accelerator pedal. Move the directional switch to FORWARD.

- a.) If the FORWARD solenoid clicks then GO TO Reverse Contacts
- b.) Check volts from BATTERY positive to the negative coil terminal on the FORWARD solenoid. If not BATTERY volts then check the solenoid bus bar connections. >STOP
- c.) Check voltage across FORWARD solenoid coil.
 - i.) If BATTERY volts then the FORWARD solenoid is bad. >STOP
 - ii.) If not BATTERY volts then check the wiring, directional switch. >STOP

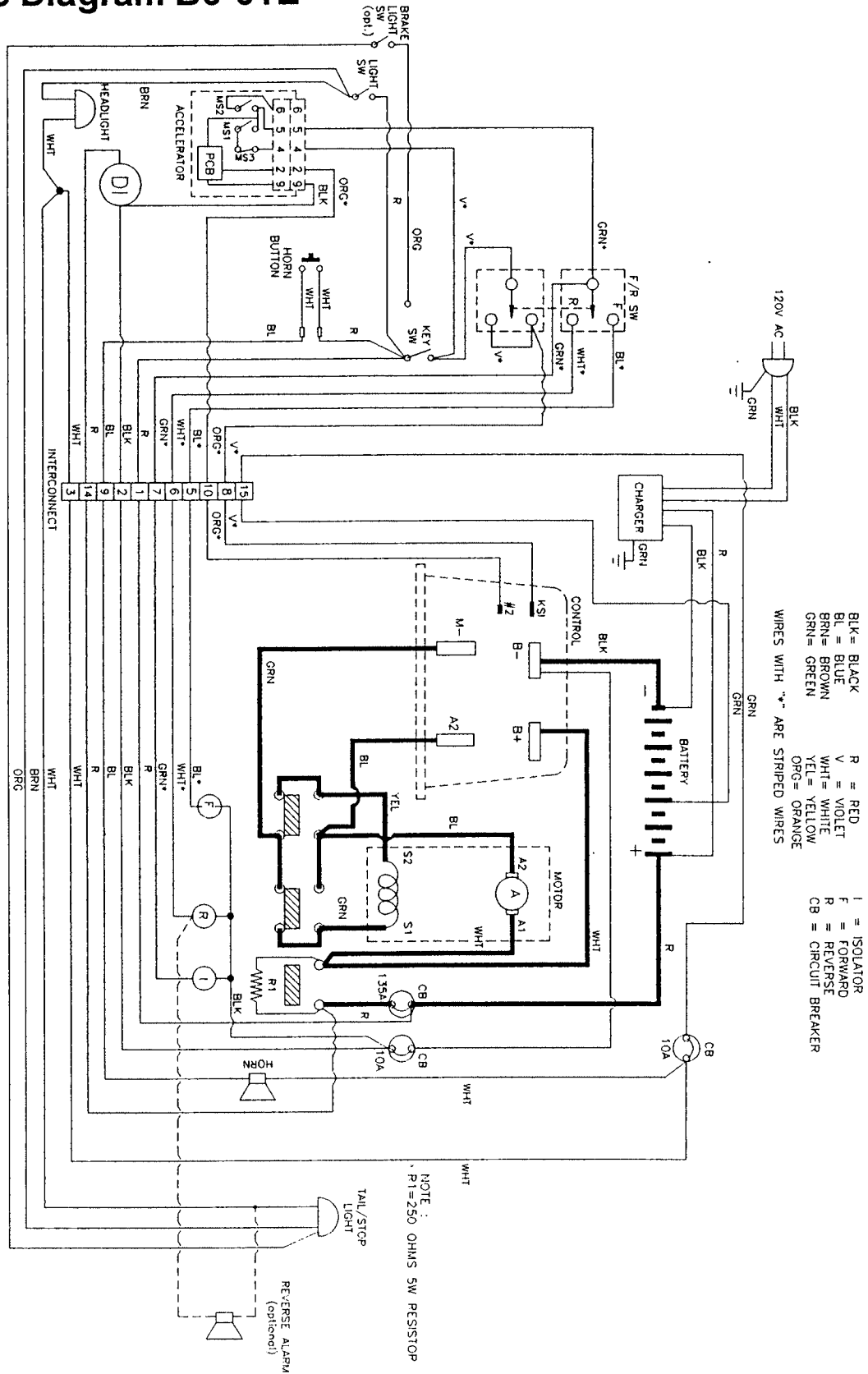
REVERSE CONTACTS

Connect the test light across the normally closed contacts of the REVERSE SOLENOID

1. Depress the accelerator pedal fully.
 - a.) If the light is on then the REVERSE solenoid is bad. >STOP
2. **CONNECT the TEST LIGHT ACROSS the normally open CONTACTS of the FORWARD SOLENOID**
 - a.) Depress the accelerator pedal fully.
3. If the light is on then the FORWARD solenoid is bad. >STOP
4. If light DID NOT come on then check all power wiring for opens. >STOP

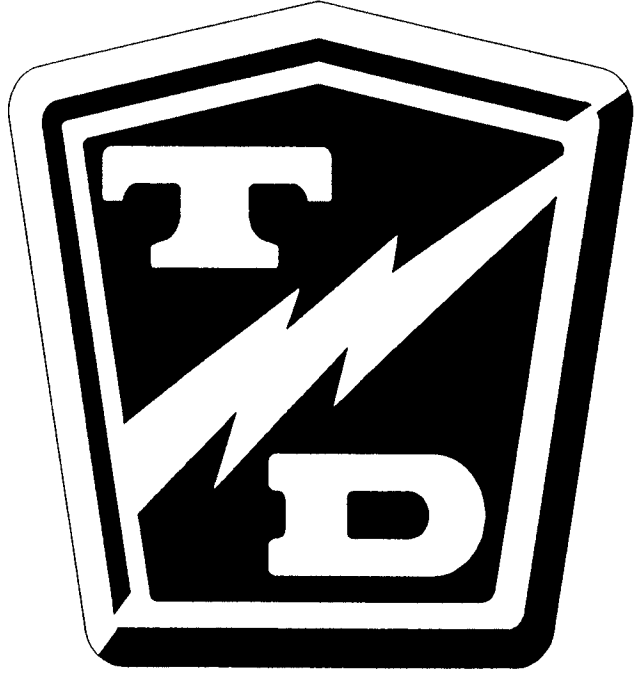
If you reached this point without a solution then you may have an unanticipated problem or have made an error during testing.

Wire Diagram B6-61E



NOTES

TAYLOR - DUNN

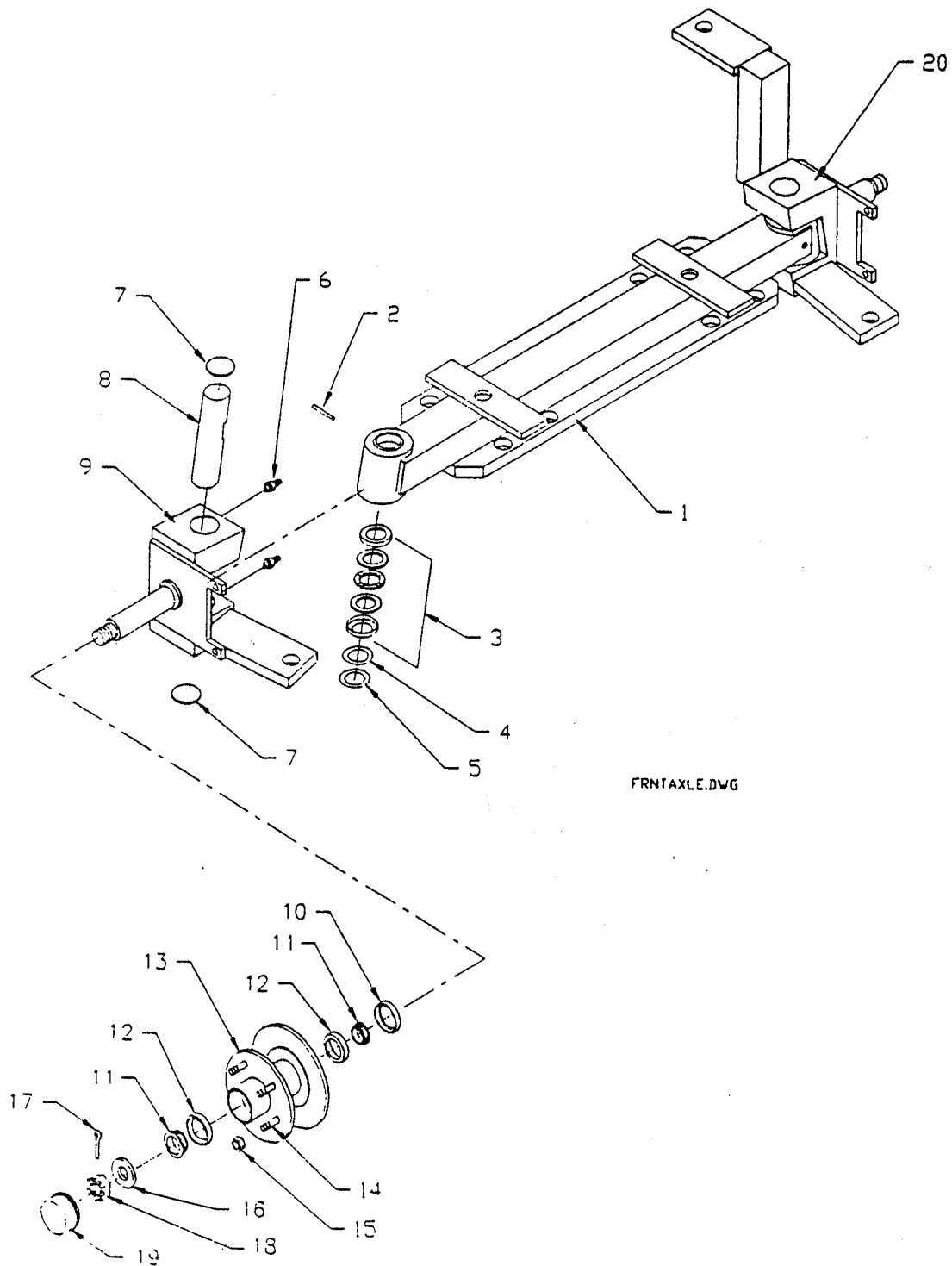


Illustrated Parts



Section 4

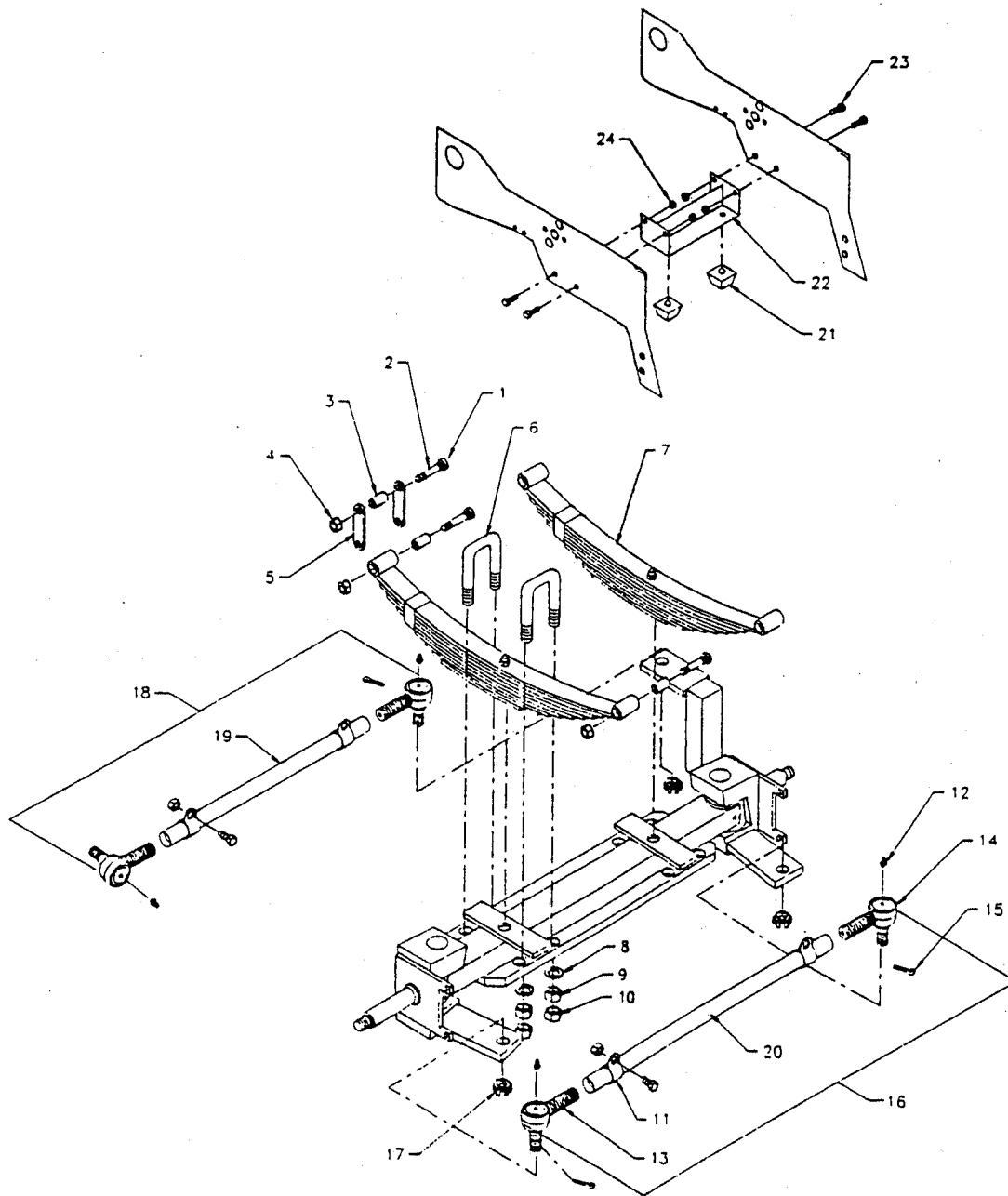
FRONT AXLE



FRONT AXLE			
ITEM#	PART #	DESCRIPTION	QTY
1	15-660-30	Front Axle	1
2	88-708-10	Taper Pin	2
3	80-309-10	Pack Bearing Assembly	2
4	16-515-03	Shim, .003" Use As Needed	N/A
5	16-515-08	Shim, .010" Use As Needed	N/A
6	87-071-00	3/16" Grease Fitting	4
7	97-198-10	Expansion Plug, 1-1/8"	4
8	21-021-00	King Pin	2
9	14-660-92	Knuckle, Left, Hydraulic Disc, 1-1/4" Bearing	1
10	45-307-00	Seal	2
11	80-011-00	Bearing, Tapered, 1-1/4" Bearing	4
12	80-102-00	Tapered Bearing Race	4
13	12-115-10	Hub W/Disc, 1-1/4" Bearing	2
14	96-329-10	Bolt, Hub	10
15	97-236-00	Lug Nut	10
16	88-228-60	3/4" Cut Washer	2
17	88-527-14	Cotter Pin	2
18	88-239-85	3/4" Slotted Nut	2
19	92-105-00	Dust Cap	2
20	14-660-93	Knuckle, Right, Hydraulic Disc, 1-1/4" Bearing	1

Section 4

FRONT SUSPENSION

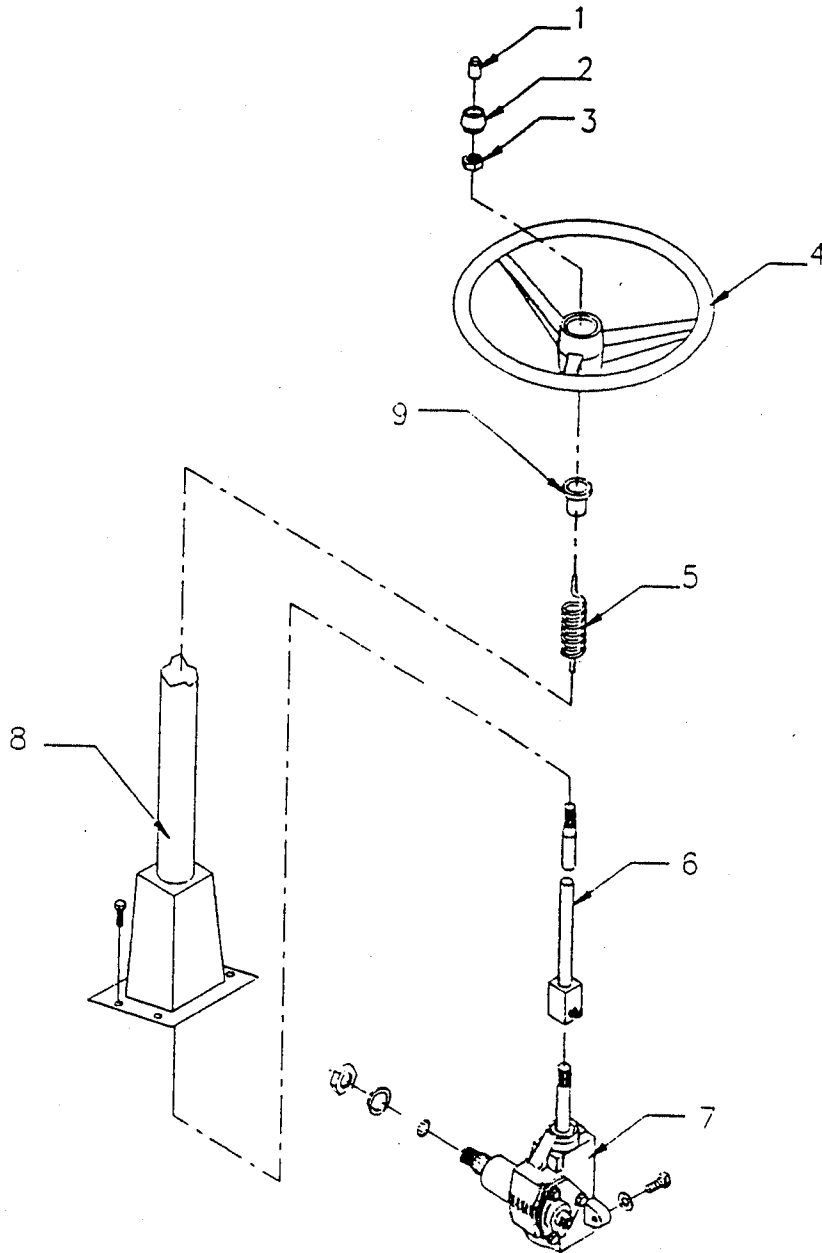


FRISUSP2.DWG

FRONT SUSPENSION			
ITEM#	PART #	DESCRIPTION	QTY
1	87-071-00	Grease Fitting	6
2	96-248-01	Shackle Bolt	6
3	32-213-00	3/4"OD X 1.656" Long, Bushing	6
4	88-169-82	9/16"NF locknut	6
5	16-870-10	2-1/4" Spring Link	4
6	96-118-00	U-Bolt	4
7	85-503-00	Leaf Spring	2
8	88-148-61	1/2"SAE Washer	8
9	88-149-80	1/2"NC Nut	8
10	88-149-81	1/2"NC Locknut	8
11	86-510-00	Clamp Assembly	4
12	87-074-00	Grease Fitting, 1/4"	4
13	86-501-98	Left Ball Joint	2
14	86-501-99	Right Ball Joint	2
15	88-827-11	Cotter Pin	4
16	18-045-00	Tie Rod Assembly 15.75" Long	1
17	88-159-85	1/2"NC Slotted Nut	4
18	10-029-10	Drag Link Assembly	1
19	18-029-00	Drag Link Sleeve	1
20	59-013-07	Steering Sleeve	1
21	98-735-05	Rubber Bumper	2
22	00-660-24	Suspension Stop Bracket	1
23	88-100-11	3/8"NC X 1" Hex Head Bolt	4
24	88-109-81	3/8"NC Locknut	4

Section 4

STEERING COLUMN

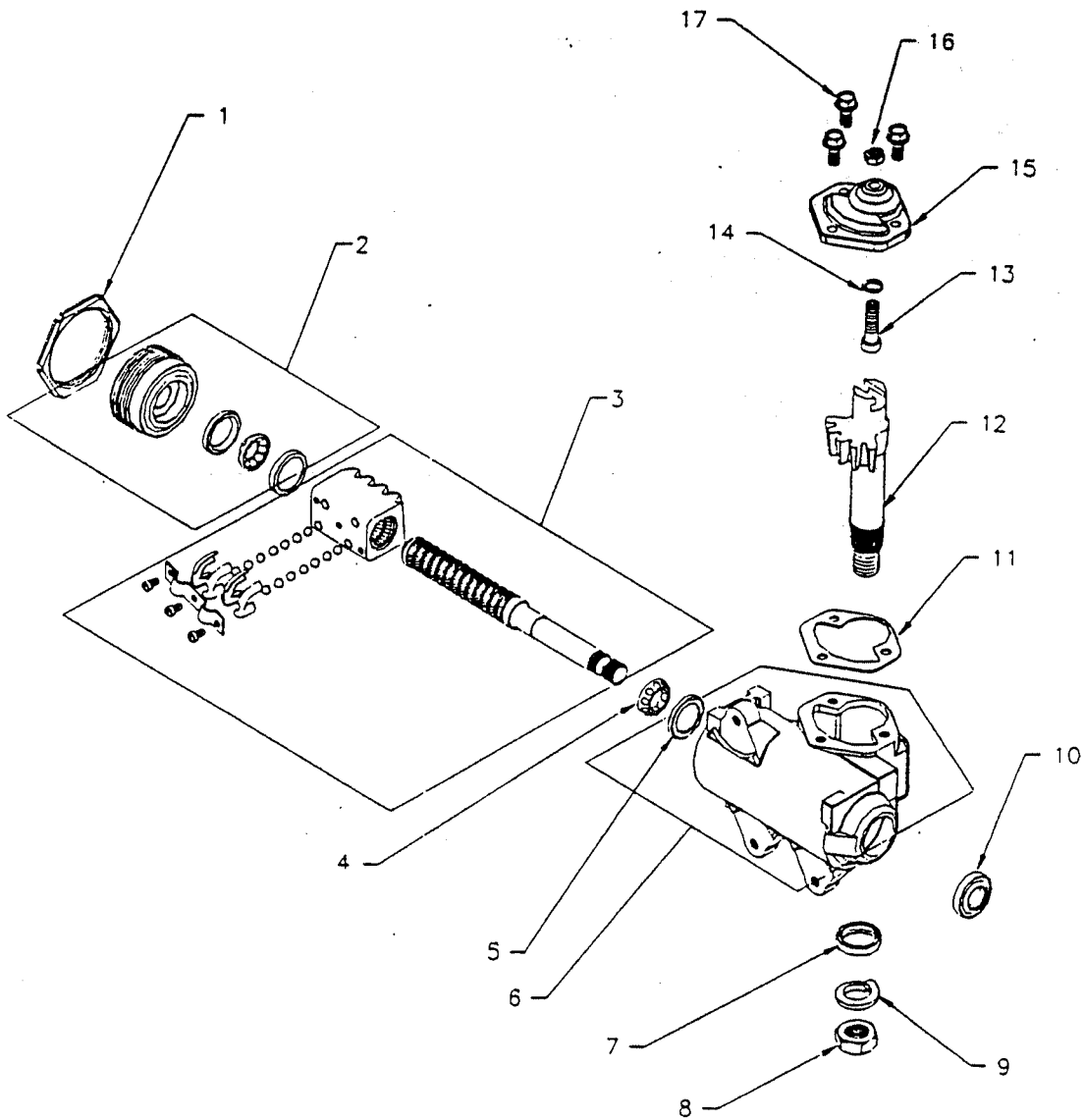


STEERING COLUMN			
ITEM#	PART #	DESCRIPTION	QTY
1	71-501-55	Horn Button	1
2	71-501-56	Collar	1
3	88-199-82	Jam Nut	1
4	19-011-20	Steering Wheel	1
5	74-148-64	Horn Wire	1
6	20-031-44	Steering Shaft, 25.984"	1
7	18-308-15	Steering Gear	1
8	*	Steering Column	1
9	32-248-10	Bushing	1

* NOT AVAILABLE AT TIME OF PRINTING

Section 4

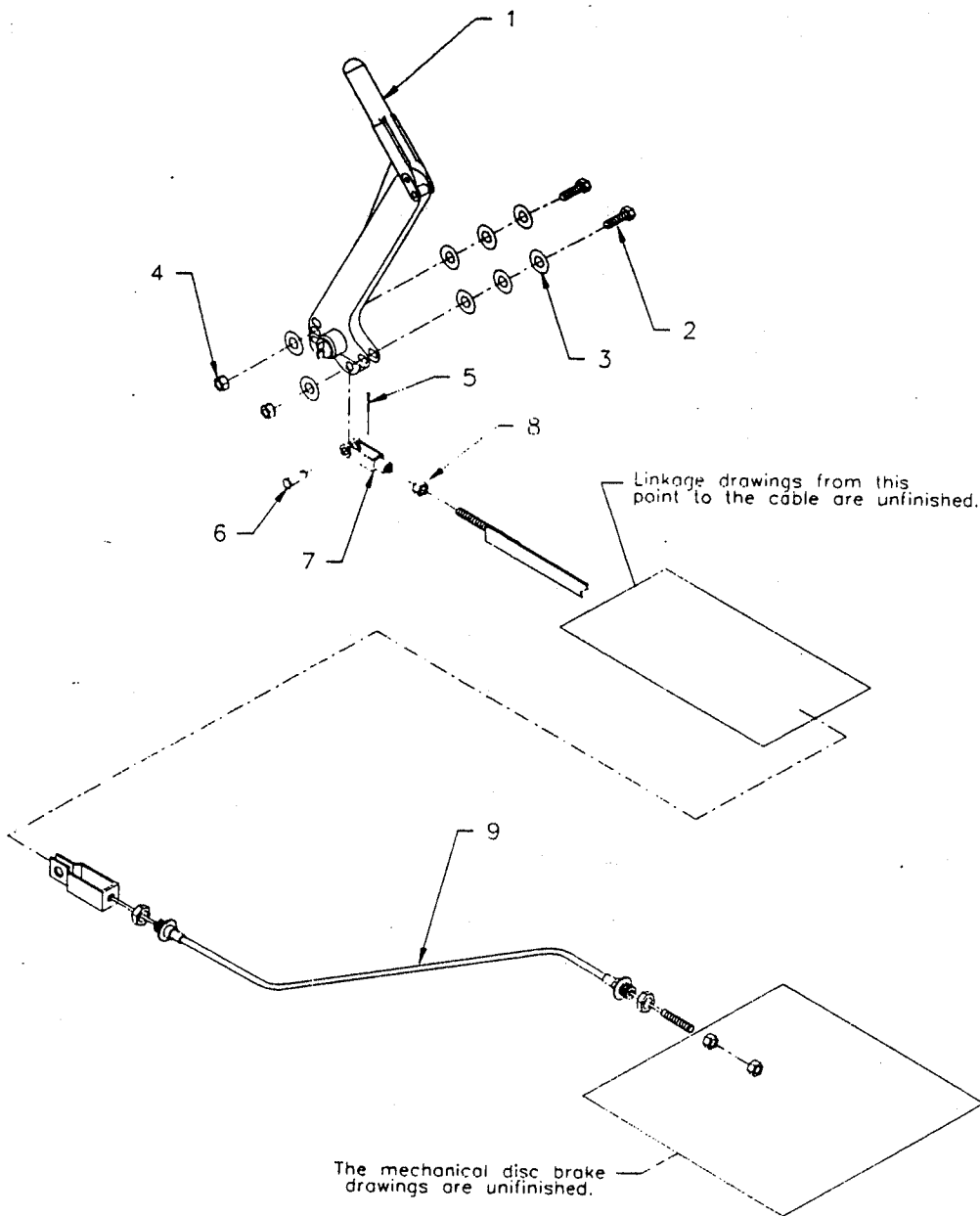
STEERING GEAR



STEERING GEAR			
ITEM#	PART #	DESCRIPTION	QTY
1	18-308-70	Locknut, Worm Bearing Adjuster	1
2	18-308-71	Adjuster Assembly	1
3	18-308-72	Worm Assembly	1
4	18-308-23	Upper Worm Bearing	1
5	18-308-22	Upper Worm Bearing Race	1
6	18-308-77	Housing, Steering Gear	1
7	18-308-78	Seal, Pitman Shaft	1
8	18-308-80	Nut, Pitman Shaft	1
9	18-308-81	Lock Washer, Pitman Shaft	1
10	18-308-79	Seal, Worm Shaft	1
11	18-308-82	Gasket, Side Cover	1
12	18-308-76	Pitman Shaft	1
13	18-308-75	Lash Adjuster	1
14	18-308-85	Shim Kit	1
15	18-308-84	Side Cover	1
16	18-308-86	Nut, Lash Adjuster	1
17	18-308-83	Bolt, Side Cover	3

Section 4

PARK BRAKE

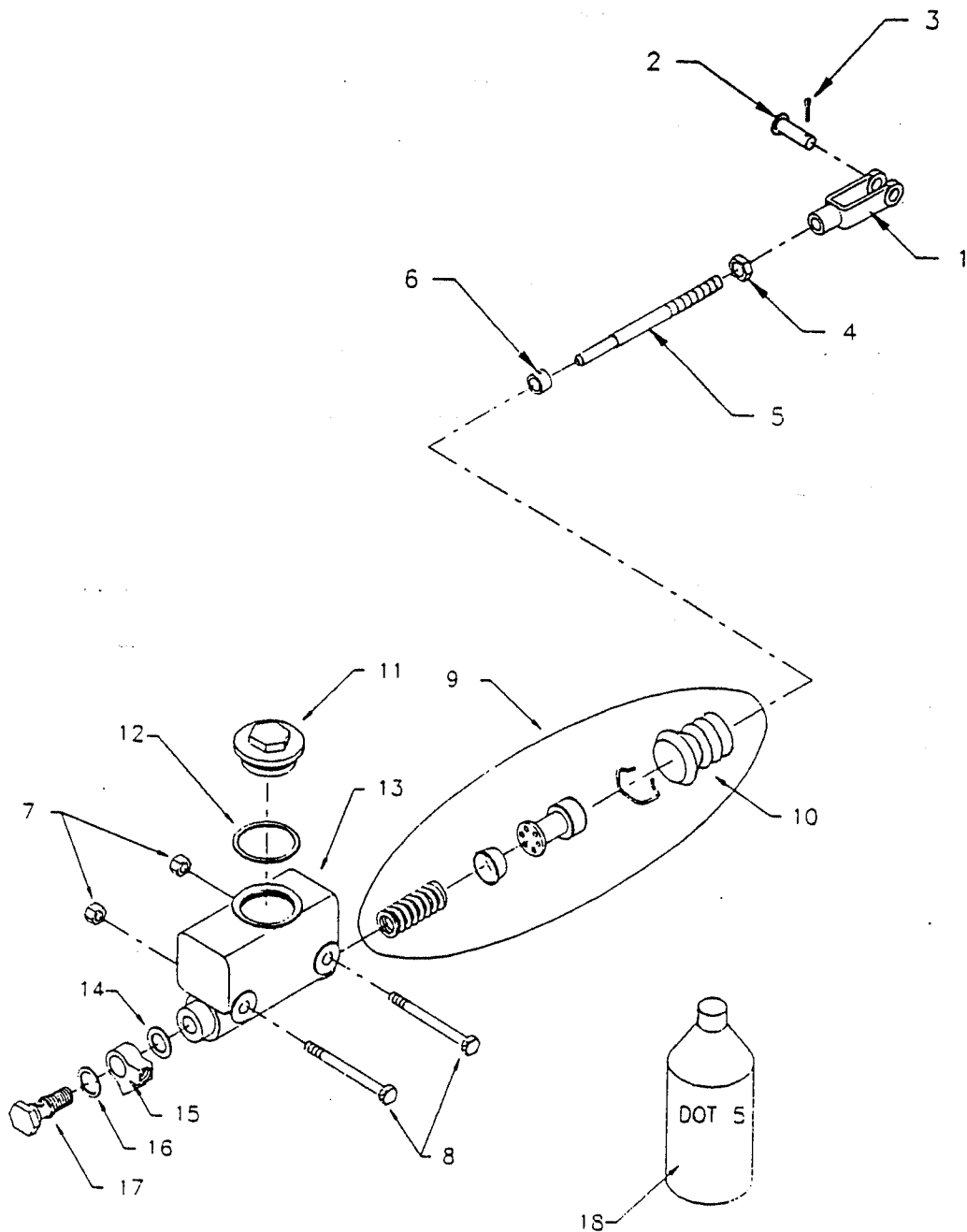


PRKLNKG.DWG

PARK BRAKE			
ITEM#	PART #	DESCRIPTION	QTY
1	51-340-00	Park Brake Lever	1
2	88-101-16	Bolt, 3/8" NC X 2" Hex head	2
3	88-108-60	Washer, 3/8" Cut	8
4	88-109-81	Locknut, 3/8"NC	2
5	88-517-11	Cotter Pin	1
6	96-772-00	Clevis Pin, 3/8" X 1"	1
7	96-762-00	Clevis	1
8	88-119-80	Nut, 3/8"NC	1
9	96-827-14	Cable Assembly, Park Brake	1

Section 4

MASTER CYLINDER AND BRAKE LINKAGE



BPM\LINK2.CWG

MASTER CYLINDER AND BRAKE LINKAGE			
ITEM#	PART #	DESCRIPTION	QTY
1	96-762-00	3/8" Clevis	1
2	96-772-00	3/8" X 1" Clevis Pin	1
3	88-527-11	1/8" X 1" Cotter Pin	1
4	88-119-80	3/8"NF Nut	1
5	50-009-00	Push Rod	1
6	17-104-00	3/8" ID Collar	1
7	88-109-81	3/8"NC Locknut	2
8	88-101-20	3/8"NC X 3" Hex Head Bolt, Grade 5	2
9	99-510-61	Master Cylinder Rebuild Kit	1
10	99-510-51	Rubber Boot	1
11	99-510-52	Cap Master Cylinder	1
12	99-510-53	Gasket	1
13	99-510-02	Master Cylinder	1
14	99-572-00	Washer	1
15	99-565-00	Y-Fitting	1
16	99-571-00	Washer	1
17	99-579-00	Bolt for Y-Fitting	1
18	94-410-00	Brake Fluid, DOT 5, 12oz Container	1

Section 4

BRAKE LINES

DRAWING NOT AVAILABLE AT TIME OF PRINTING

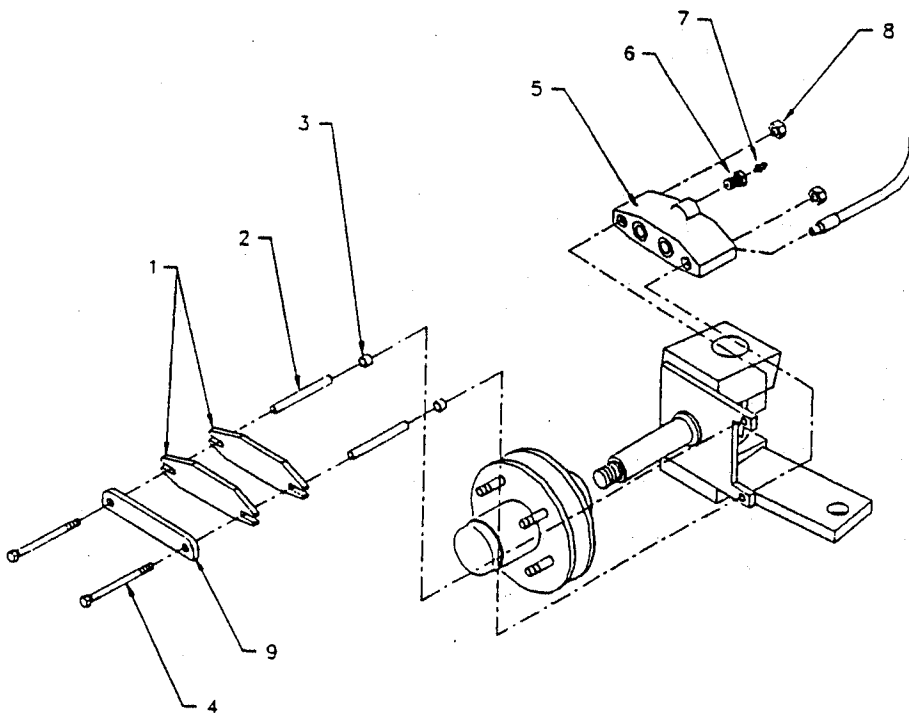
BRAKE LINES			
Front			
ITEM#	PART #	DESCRIPTION	QTY
	99-603-58	Front Brake Line	1
	99-604-42	Front Brake Line	1
	99-559-00	T-Fitting	1
	99-580-10	Brake Hose	2
	99-576-00	Brake Hose Clip	1
Rear			
	99-604-61	Rear Brake Line	1
	99-609-01	Rear Brake Line, 3/16" X 72"	1
	99-605-01	Rear Brake Line from Master Cylinder to rear Fitting	1
	99-559-00	T-Fitting	1
	99-580-10	Brake Hose	2
	99-576-00	Brake Hose Clip	1
	71-110-00	Brake Light Switch	1
	99-575-00	Union	1

Section 4

FRONT BRAKE

⚠ WARNING

The axle mounting bolts and the brake body mounting nuts can only be used once. If removed they must be replaced.

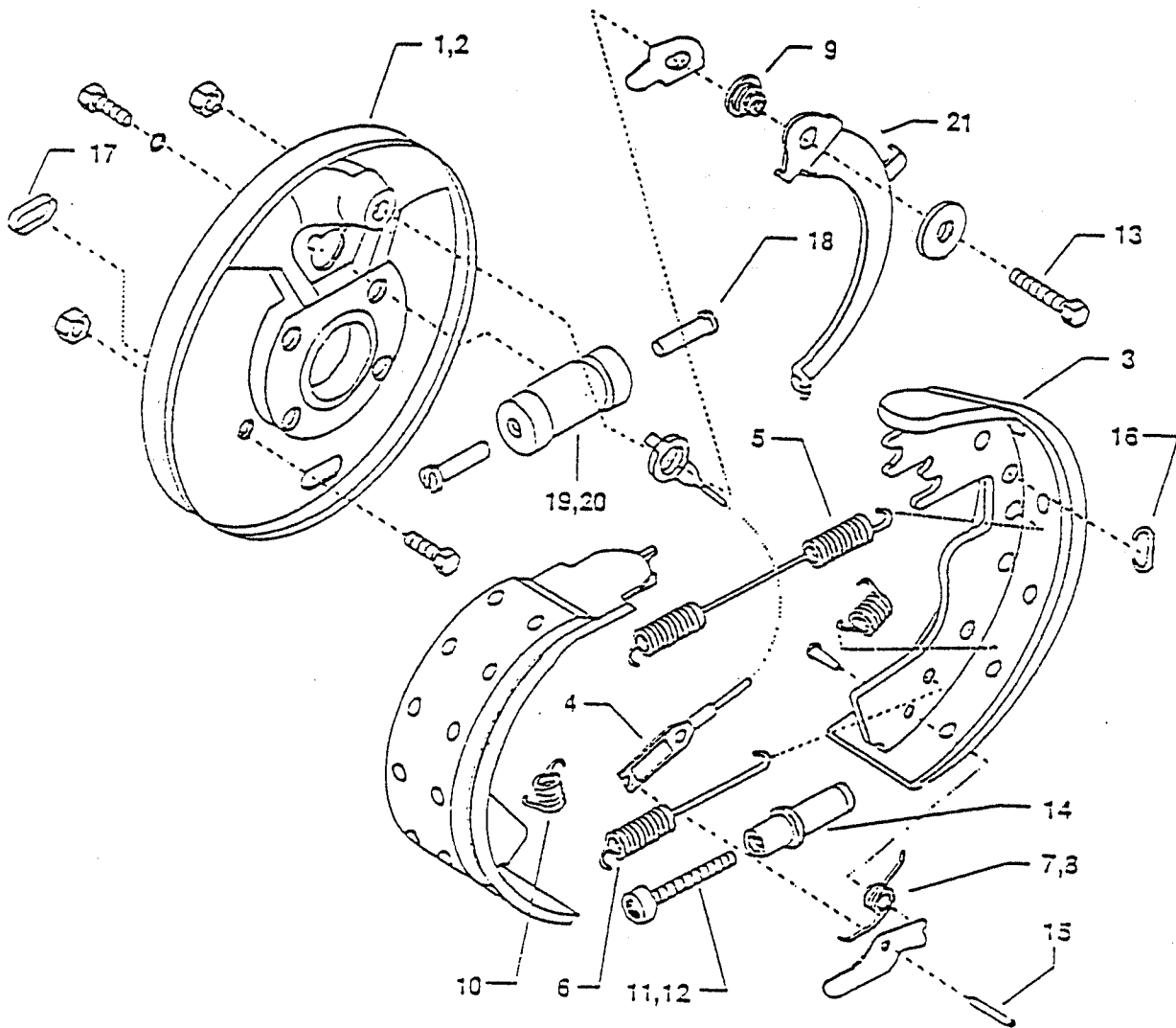


FRBRK2.0WG

FRONT BRAKE			
ITEM#	PART #	DESCRIPTION	QTY
1	41-348-70	Disc Brake Pad	2
2	41-348-52	Spacer	2
3	32-240-40	Bushing	2
4	88-067-21	Brake Body Bolt	2
5	41-350-70	Brake Body, (Left and Right)	1
6	99-588-01	Bleeder Fitting	1
7	99-588-00	Bleeder Valve	1
8	88-069-82	1/4" NC Locknut, Grade 8 DO NOT REUSE	2
9	41-350-51	Secondary Plate	1

Section 4

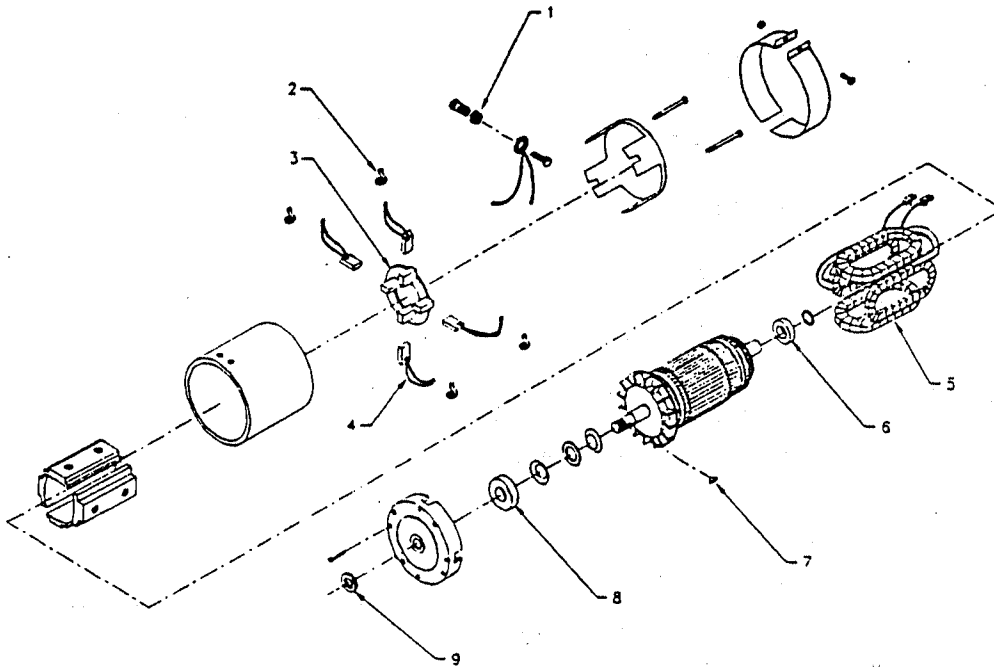
REAR BRAKES



REAR BRAKES			
ITEM#	PART #	DESCRIPTION	QTY
1	41-351-98	Left Backing Plate	1
2	41-351-99	Right Backing Plate	1
3	42-352-60	Brake Shoes	1(set)
4	96-828-00	Rear Brake Cable	2
5	85-211-10	Spring, Brown	2
6	85-209-10	Spring, Brown	2
7	85-352-00	Spring Torsion, Right, Black	1
8	85-352-10	Spring Torsion, Left, Yellow	1
9	85-352-20	Spring, Compression, Black	2
10	85-352-30	Spring, Red	4
11	96-352-98	Brake Adjusting Screw, Left	1
12	96-352-99	Brake Adjusting Screw, Right	1
13	96-000.10	Brake Anchor Bolt	2
14	41-678-10	Brake Adjusting Socket	2
15	41-352-00	Brake Adjusteor Pin	2
16	41-352-10	Brake Shoe Hold-Down Pin	4
17	41-684-10	Adjusting Hole Cover	2
18	41-683-10	Wheel Cylinder rod	4
19	99-502-98	Left Wheel Cylinder	1
20	99-502-99	Right Wheel Cylinder	1
21	41-311-72	Lever, Hand Brake, Left	1
	41-311-73	Lever, Hand Brake, Right	1

Section 4

MOTOR



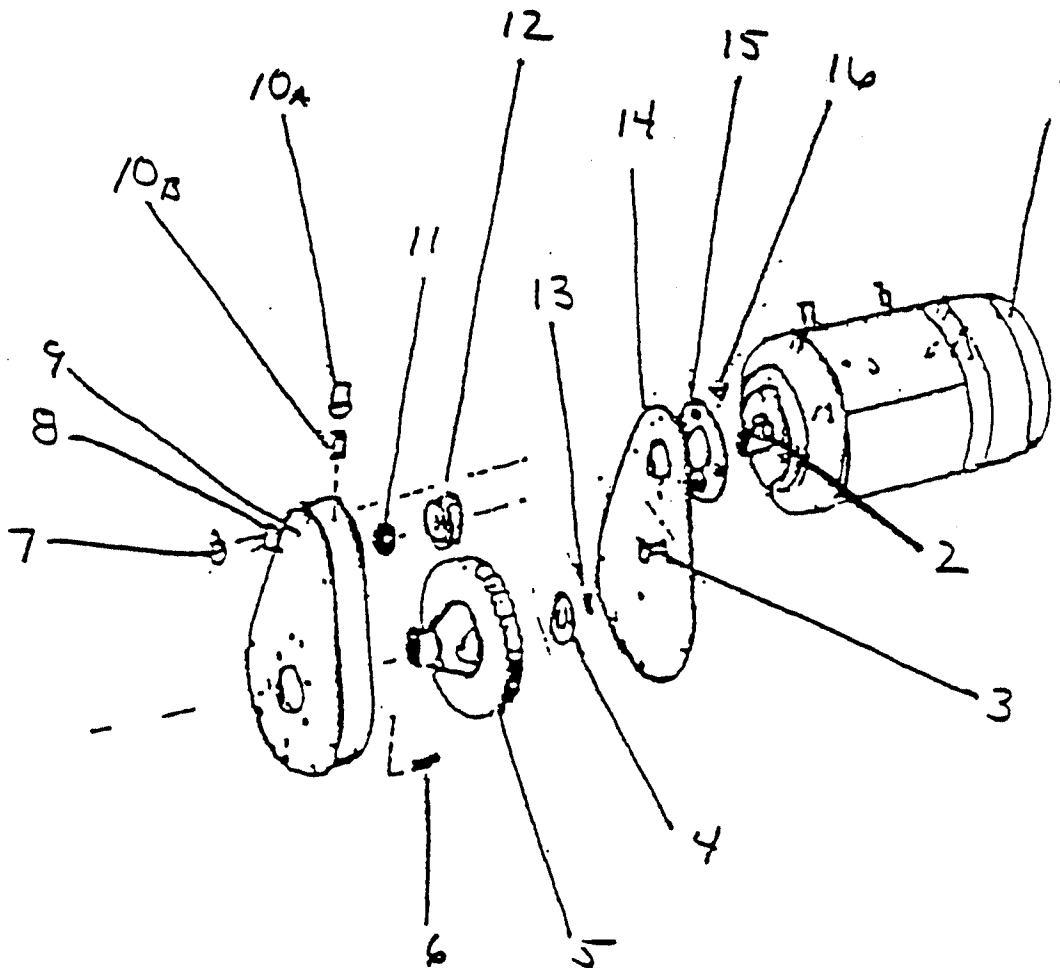
MOTOR2.DWG

MOTOR (SBT1326B96) 70-061-00			
ITEM#	PART #	DESCRIPTION	QTY
1	70-210-64	Insulator Kit	4
2	85-398-00	Brush Spring	2
3	70-171-00	Brush Holder Assembly	1
4	70-112-00	Brush	4
5	*	Field Coil	1
6	80-504-00	Ball Bearing	1
7	97-100-00	Woodruff Key	1
8	80-209-00	Ball Bearing	1
9	45-506-00	Oil Seal	1

* PART NUMBER NOT AVAILABLE AT TIME OF PRINTING

Section 4

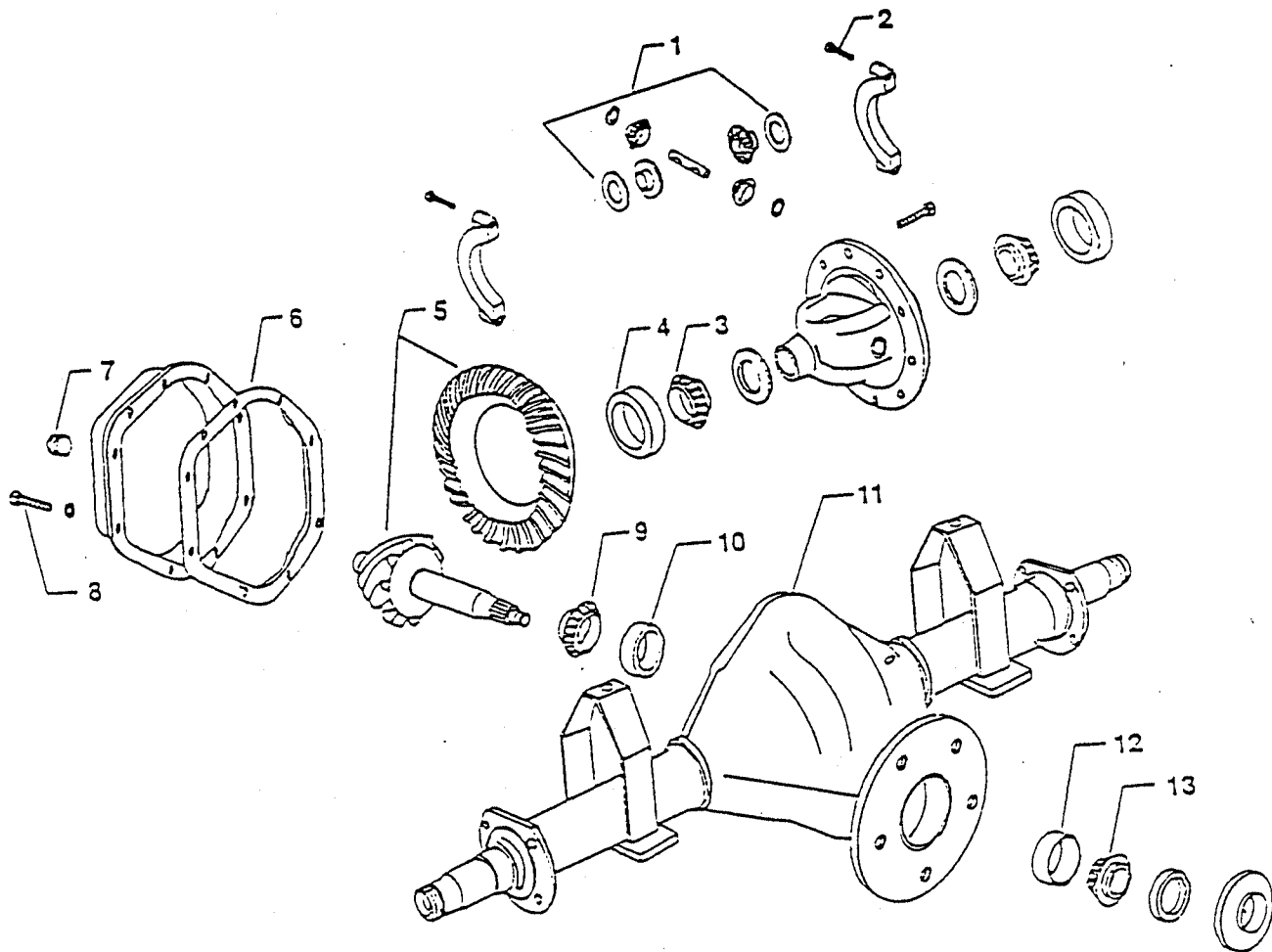
POWER TRACTION



POWER TRACTION			
ITEM#	PART #	DESCRIPTION	QTY
1	70-061-00	Motor	1
2	45-507-00	Oil Seal	1
3	88-103-09	3/8" X 3/4"NC	8
4	88-268-81	7/8" SAE Washer	8
5	31-202-10	84 Tooth Spur Gear, 10 Tooth Hub Spline	1
	31-202-12	84 Tooth Spur Gear, 29 Tooth Hub Spline	1
	31-206-10	67 Tooth Spur Gear, 10 Tooth Hub Spline	1
	31-206-12	67 Tooth Spur Gear, 29 Tooth Hub Spline	1
6	88-617-09	3/8" X 3/4" Dowel pin	2
7	88-101-20	3/8" X 3" Hex Head Cap Screw	3
8	88-108-62	3/8" Lockwasher	12
9	43-200-10	Gear Case and Cover Set	1
10A	41-986-00	Vented Filler Cap	1
10B	41-987-00	Riser Pipe	1
11	97-241-00	3/4"NF Hex Head Jam Nut	1
12	31-229-00	17 Toothed Gear (Goes with 84 Toothed Gear)	1
	31-232-00	17 Toothed Gear (Goes with 67 Toothed Gear)	1
13	88-279-81	7/8"NF Hex Head Locknut	1
14	43-200-10	Gear Case and Cover Set	1
15	45-010-00	Motor Gasket	1
16	97-100-00	3/16" Woodruff Key	1

Section 4

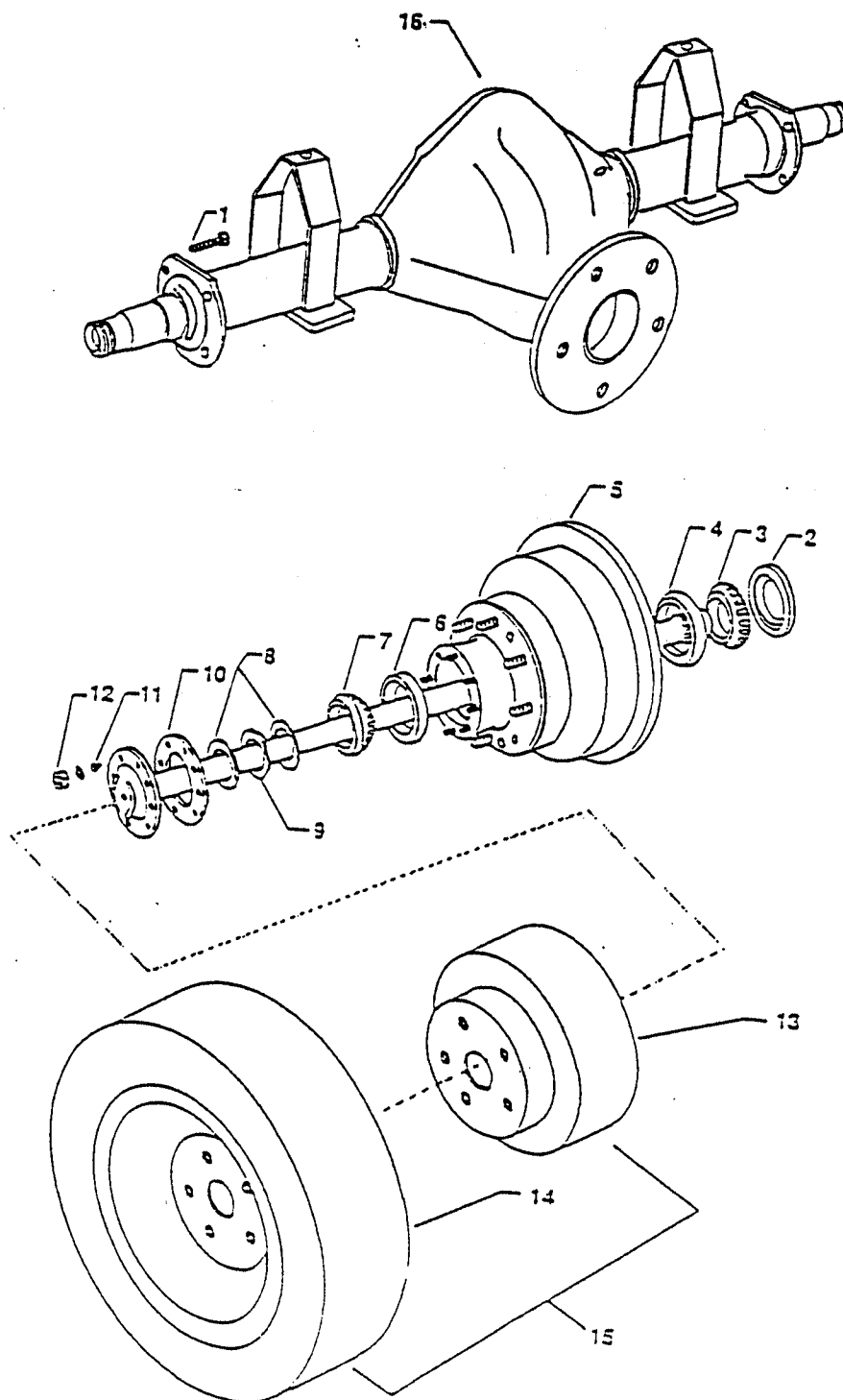
DIFFERENTIAL



DIFFERENTIAL			
ITEM#	PART #	DESCRIPTION	QTY
1	41-873-52	Differential Carrier Assembly	1
2	88-151-13	1/2"NF X 1-1/8",Hex Head Cap Screw	4
3	80-153-00	Tapered Roller Bearing	2
4	80-136-00	Bearing Race	2
5	80-512-00	Carrier Bearing, 1.784" ID	2
6	31-243-10	Ring and Pinion Gear Set(6.17, 29 tooth spline)	1
7	41-855-00	Plug, Fill and Drain	1
8	88-140-16	1/2"NC X 2" Hex Head Cap Screw	10
9	80-532-00	Tapered Roller Bearing	1
10	80-137-00	Rear Pinion Bearing Race	1
11	*	Housing	1
12	80-138-00	Front Pinion Bearing Race	1
13	80-533-00	Front Pinion Bearing	1

* NOT AVAILABLE AT TIME OF PRINTING

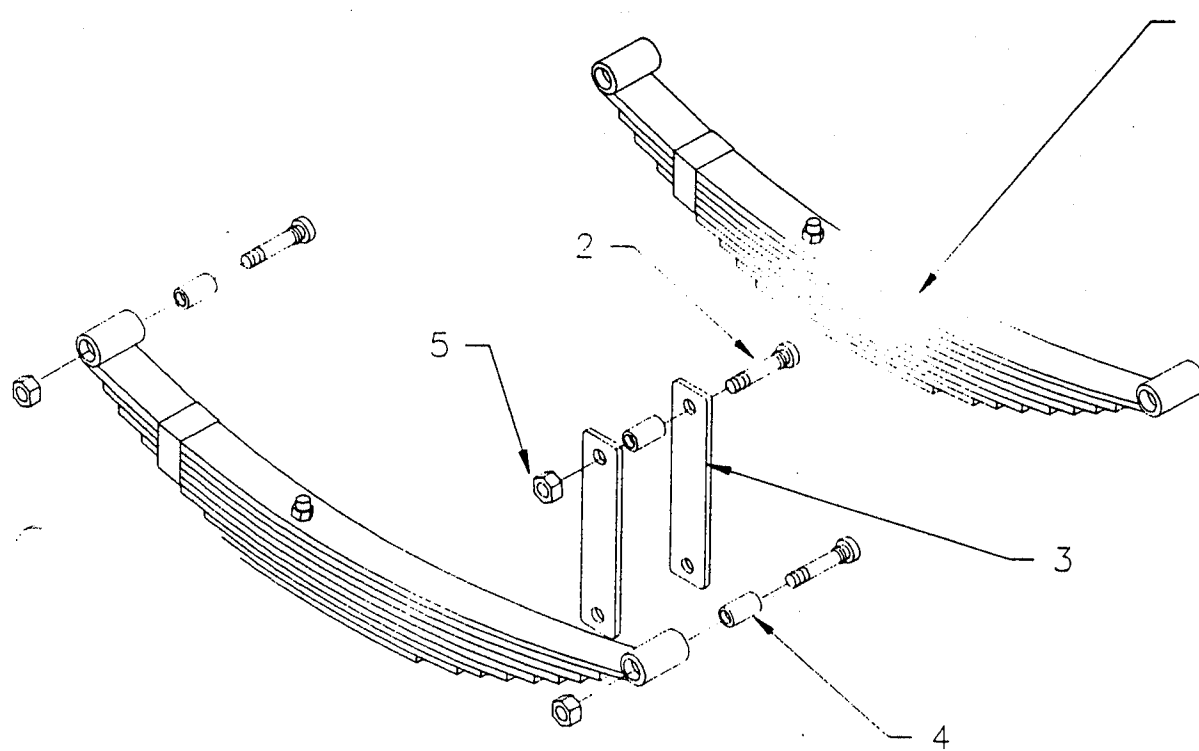
REAR AXLE



REAR AXLE			
ITEM#	PART #	DESCRIPTION	QTY
1	97-236-00	Lug Nut	10
2	96-239-10	Bolt	10
3	41-152-00	Axle, 17-1/8", Large Bearing	2
4	80-503-00	Axle Bearing, Ball Type	2
5	32-515-00	Bearing Retainer	2
6	45-301-00	Seal	2

Section 4

REAR SUSPENSION

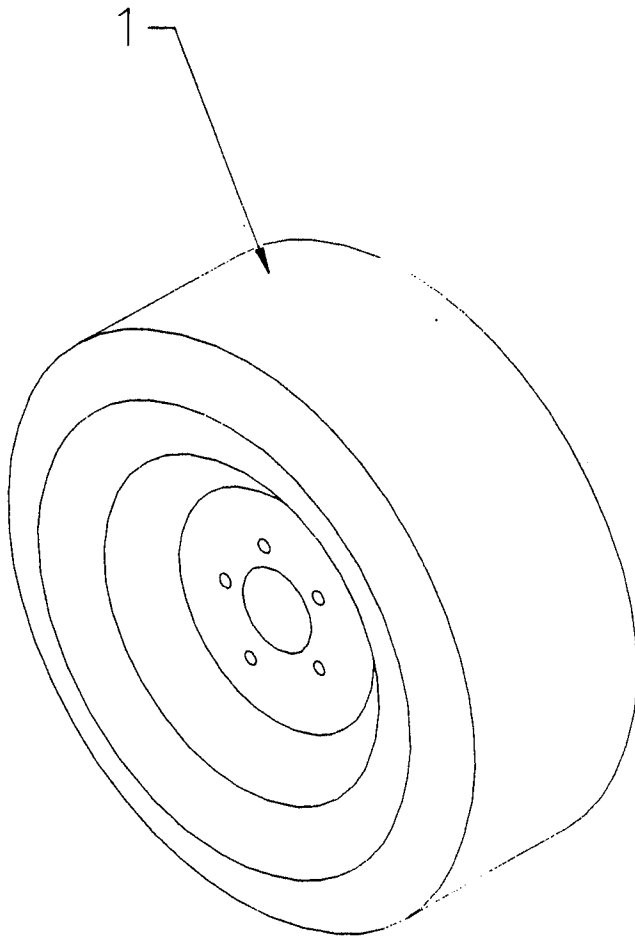


B661E Rear Suspension.DWG

REAR SUSPENSION			
ITEM#	PART #	DESCRIPTION	QTY
1	85-503-05	Leaf Spring	2
2	96-248-01	Schakle Bolt	6
3	88-109-81	3/8"NC Locknut	8
4	32-213-00	Nylon Bushing	6
5	88-169-82	9/16NF Locknut, Grade C	6
Not Shown	96-111-00	U-Bolt	4
	88-168-81	9/16"NF Locknut	8

Section 4

TIRES



TIRES.DWG

TIRE			
ITEM#	PART #	DESCRIPTION	QTY
1	13-957-11	18 X 5 X 14.5, Tires, Front	2
	13-958-10	21 X 5 X 15.8, Tires, Rear	2

Section 4

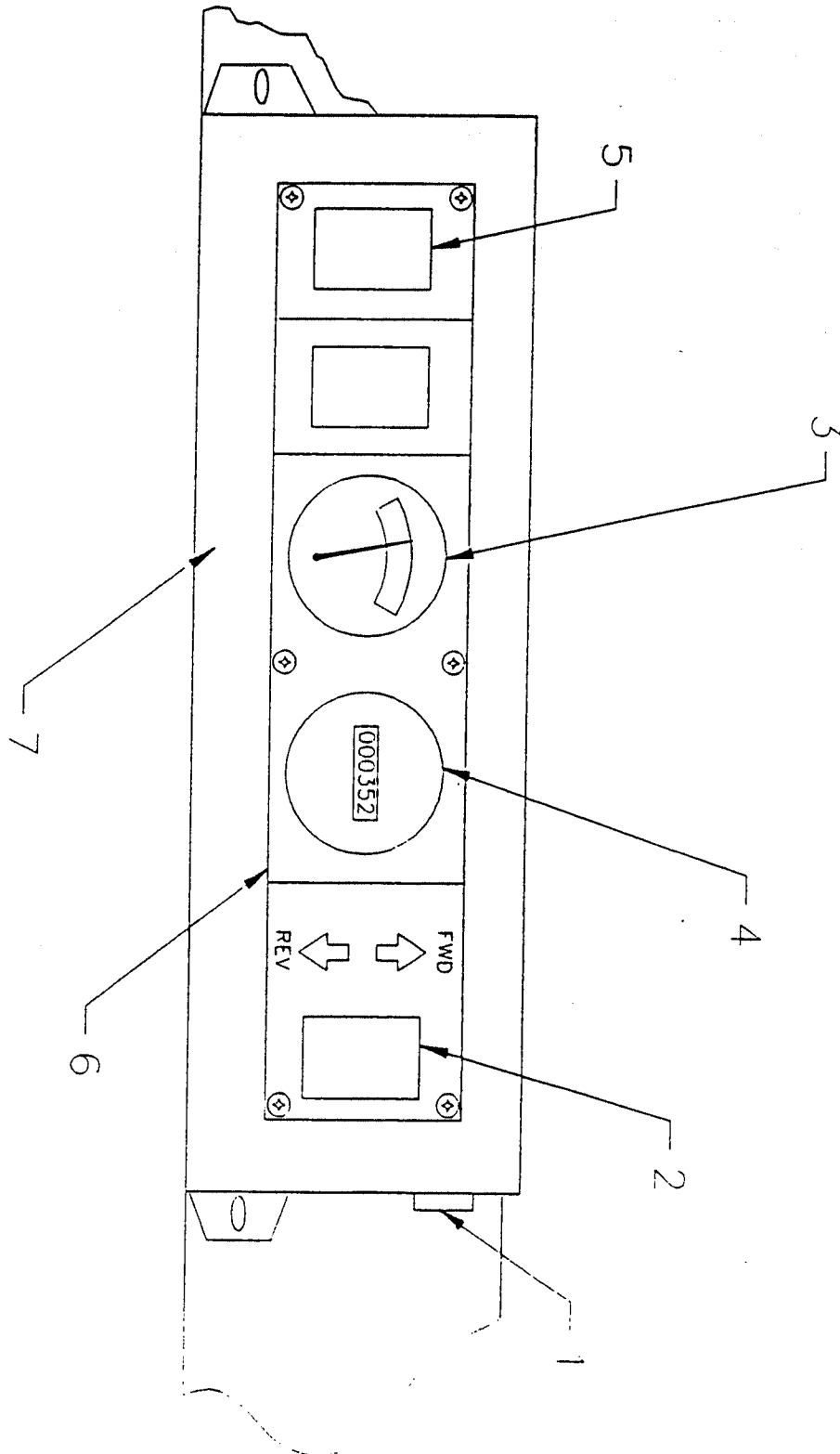
CONTROL PANEL

DRAWING NOT AVAILABLE AT THE TIME OF PRINTING

CONTROL PANEL			
ITEM#	PART #	DESCRIPTION	QTY
	71-350-70	Forward/Reverse Contactor	1
	88-838-06	#14 X 1/2" Sheet Metal Screw	10
	K1-400-51	Mounting Panel	1
	62-205-40	Controller	1
	71-305-90	ISO Contactor	1
	79-840-00	Circuit Breaker, 10Amp	2
	79-844-20	Circuit Breaker, 20Amp	1
	88-089-00	5/16"NC Nut	4
	88-088-62	5/16" Lockwasher	4
	88-080-11	5/16" X 1" Bolt, Hex Head	4
	88-099-91	5/16"NF Thin Pattern Nut	10
	88-088-63	5/16" Internal Toothed Lockwasher	10
	88-049-80	#10-32 Nut	6
	88-048-62	#10 Lockwasher	6
	88-817-09	#8 X 3/4" Sheet Metal Screw	2
	78-302-50	250 ohm, 5 Watt, Resistor	1
	75-148-25	Control Panel Harness	1
	K1-401-25	Control Panel Power Harminness	1
	62-030-19	Accelerator Module	1
	73-002-00	Horn, 36V	1

Section 4

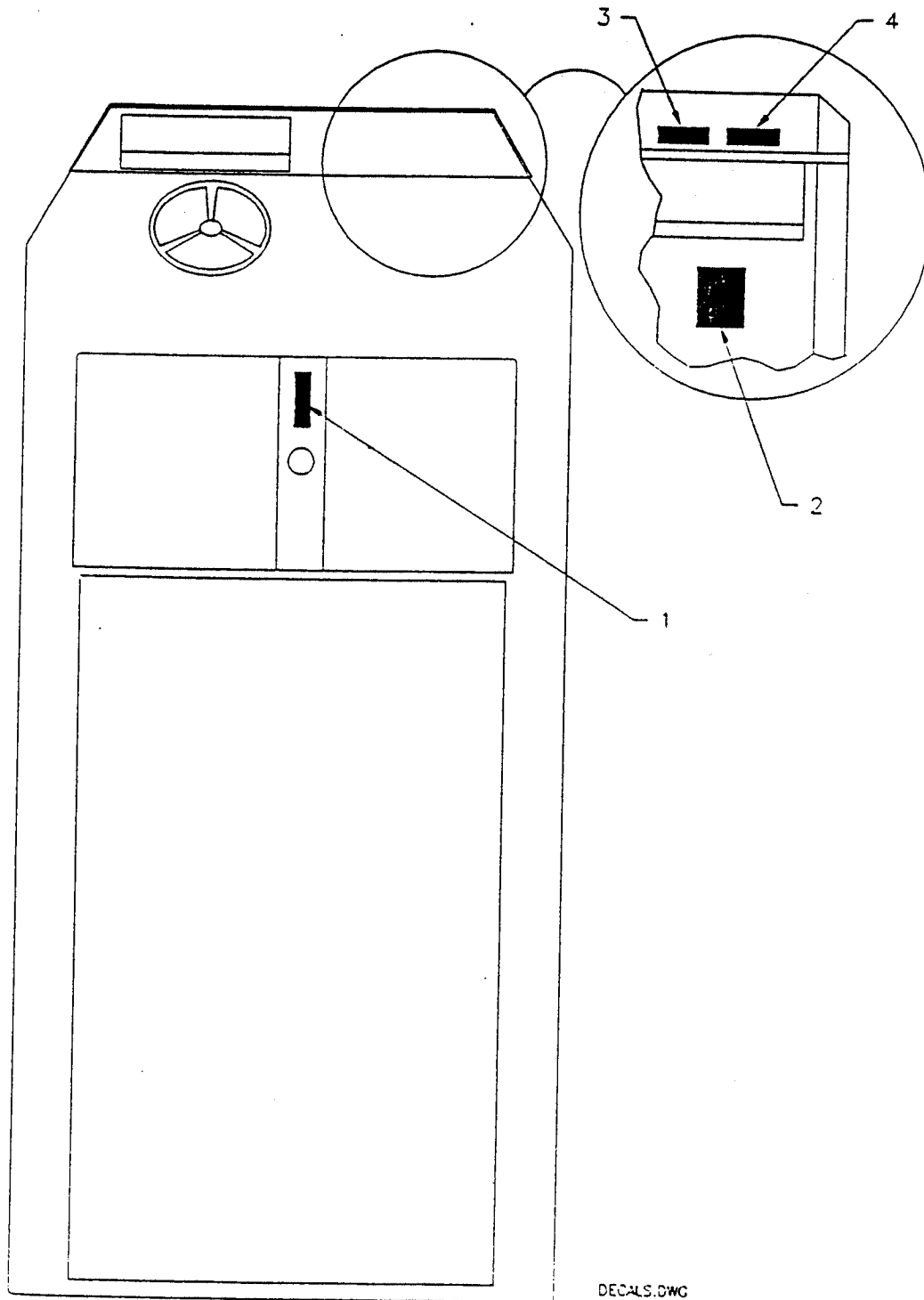
INSTRUMENT PANEL



INSTRUMENT PANEL			
ITEM#	PART #	DESCRIPTION	QTY
1	71-120-00	Key Switch	1
2	71-039-00	Forward/Reverse Switch	1
3	74-009-00	Battery Status Indicator	1
4	74-000-00	Hourmeter	1
5	71-039-10	Headlight Switch	1
6	94-304-10	Instrument Panel	1
7	00-610-01	Instrument Console, Painted Black	1

Section 4

DECALS



DECALS.DWG

DECALS			
ITEM#	PART #	DESCRIPTION	QTY
1	94-376-00	Decal, Main Power Disconnect	1
2	94-319-00	Decal, Battery Disconnect	1
3	94-313-00	Decal, Battery Warning	1
4	94-313-20	Decal, Safety Warning	1

Section 4

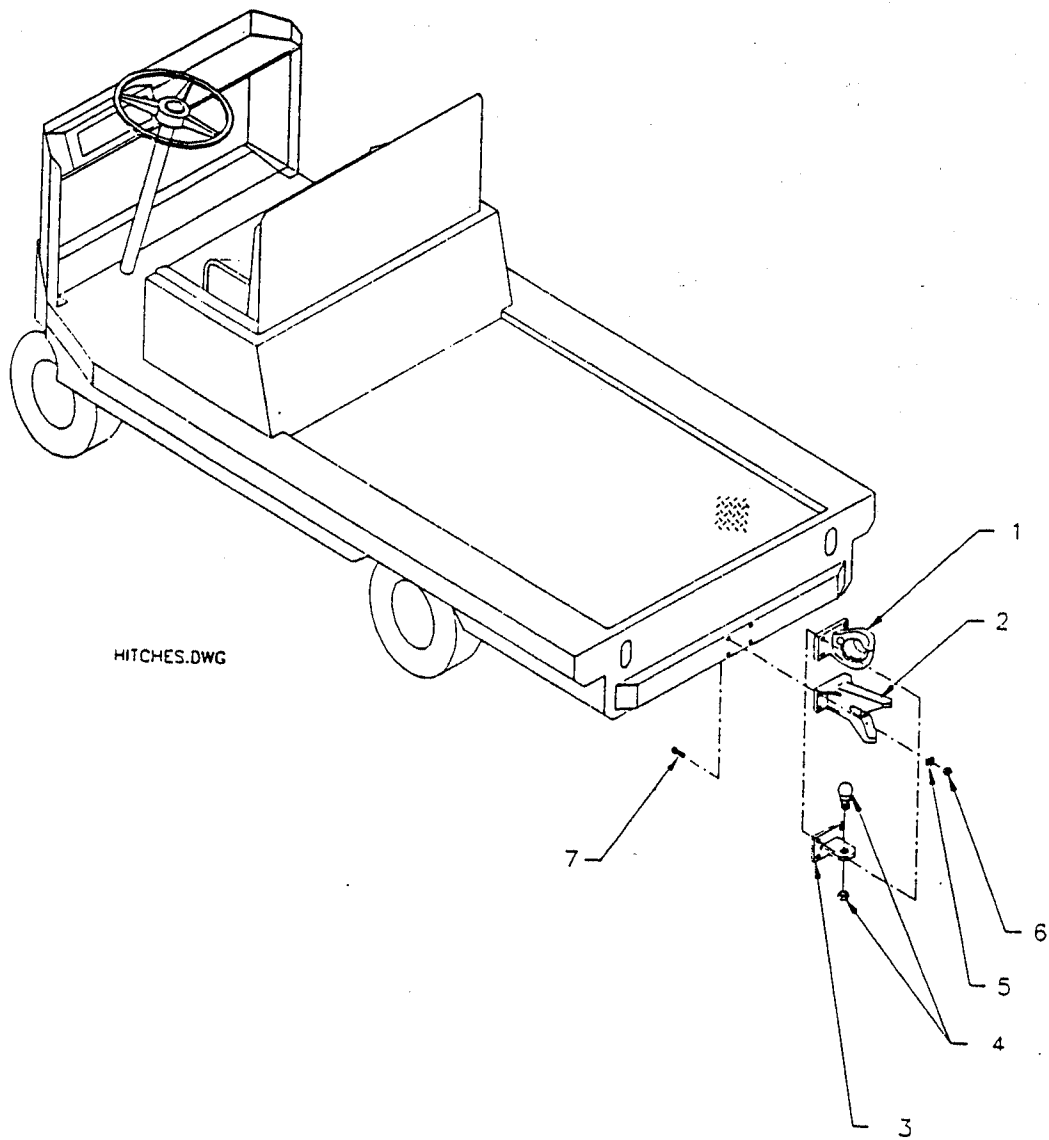
MISC. STANDARD PARTS

DRAWING NOT AVAILABLE AT THE TIME OF PRINTING

MISC. STANDARD PARTS			
ITEM#	PART #	DESCRIPTION	QTY
1	94-050-10	Headlight, Left	1
2	94-050-11	Headlight, Right	1
3	94-201-10	TD Name Plate	1
4	94-201-11	Fastener Strip	2
5	88-817-07	#8 X 1/2" Self Tapping Screw	14
6	00-660-11	Lens and Nameplate Mounting Panel	1
7	88-065-09	1/4"NC X 3/4" Phillips Truss Head Screw	12
8	90-179-00	Back Rest	1
9	90-173-00	Seat Cushion	1
10	88-837-09	#14 X 3/4" Phillips Truss Head Sheet Metal Screw	12
11	88-065-06	1/4"NC X 1/2" Phillips Truss Head Screw	6
12	88-069-81	1/4"NC Locknut	16
13	72-028-20	Stop, Turn and Tail Light	2
14	72-074-00	Headlight Bulb, 36V	2
15	72-022-51	Ring, Rubber, headlight Mounting	2
16	71-124-00	Emergency Disconnect Switch	1

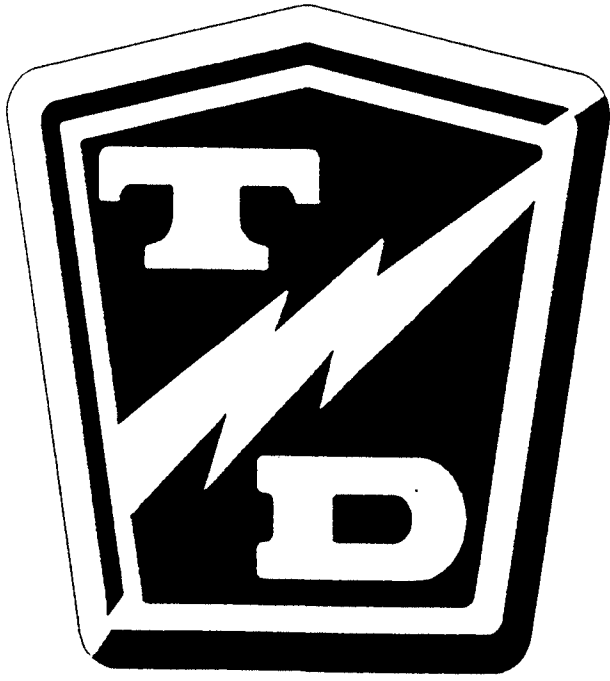
Section 4

HITCHES



HITCHES			
ITEM#	PART #	DESCRIPTION	QTY
1	97-804-01	Hitch, Pintle Type	1
2	97-808-00	Hitch, Automatic Coupling	1
3	97-808-00	Ball Hitch Mounting Bracket, 1-7/8"	1
	97-805-00	Ball Hitch Mounting Bracket, 2"	1
4	97-811-00	Hitch, 1-7/8" Ball	1
	97-821-00	Hitch, 2" Ball	1
5	88-148-62	1/2" Lockwasher	4
6	88-149-80	1/2"NC Nut	4
7	88-140-14	1/2"NC X 1-1/2" Hex Head	4

TAYLOR-DUNN



MANUAL REVISION LIST			
Model: B6-61E			
Revision Date	Version Number/ Rev. Letter	Description	Revised By
5/98	99/A	New Manual Original Release	CAM

NOTES

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